

CC the zeta-COP nucleotide sequence
XX
SQ Sequence 23 BP; 6 A; 5 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 23;
Best Local Similarity 85.7%; Pred. No. 1.4e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3185 TCCAGCTGCGCCGAGCTGG 3205
DB 22 TCCATCTTGCCTGGAGCTGG 2

RESULT 945
AAH23021/c
ID AAH23021 standard; DNA; 23 BP.

XX AAH23021;
XX DT 17-SEP-2001 (first entry)
XX VEGPR-2 gene specific reverse primer.

XX Vascular endothelial growth factor; VEGF; antisense; angiogenesis;
KW cell proliferation; Kaposi's sarcoma; cancer; melanoma; cytostatic;
KW antisense therapy; RT-PCR; primer; VEGPR-2; ss.

OS Synthetic.
OS Homo sapiens.

XX WO200152904-A2.

XX 26-JUL-2001.

XX 19-JAN-2001; 2001WO-US000019.

XX 19-JAN-2000; 2000US-00487023.

XX (GILL/) GILL P S.

XX Gill PS, Masood R;

XX WPI; 2001-451898/48.

XX Novel antisense oligonucleotides useful for inhibiting vascular

PT endothelial growth factor expression, angiogenesis and for treating

PT cancer, e.g., Kaposi's sarcoma, ovarian cancer and prostate cancer.

XX Example 12; Page 56; 105pp; English.

XX The invention provides a composition comprising one or more antisense
CC oligonucleotides directed against vascular endothelial growth factor
CC (VEGF) where the antisense oligonucleotides inhibits proliferation of
CC cells exhibiting autocrine VEGF activity at an IC₅₀ concentration of
CC between 0.5-2.5 micro Ma. The antisense oligonucleotides may be directed
CC against VEGF for inhibiting cancer cell proliferation and angiogenesis.
CC Preferably the oligonucleotide AAH23032 (a modified version of AAH22984)
CC is used and may be utilized to treat Kaposi's sarcoma, ovarian cancer,
CC prostate cancer, pancreatic cancer or melanoma. Sequences AAH23012-023
CC represent gene-specific primers used in RT-PCR amplification of VEGF
CC receptors

XX Sequence 23 BP; 4 A; 7 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 23;
Best Local Similarity 85.7%; Pred. No. 1.4e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1950 GATCATGCGGAGCTGCTGGCA 1970
DB 21 GACCATGCTGGAGCTGCTGGCA 1

RESULT 946
ABT11934

XX ABT11934 standard; DNA; 23 BP.
XX ABT11934;
XX DT 19-DEC-2002 (first entry)

XX Human immunoglobulin heavy chain PCR primer #3.

XX Human; PCR; primer; ss; transgenic ungulate; xenogenous immunoglobulin;
KW infectious disease; cancer cell removal.

OS Homo sapiens.

XX WO200270648-A2.

XX 12-SEP-2002.

XX 16-NOV-2001; 2001WO-US043128.

XX 17-NOV-2000; 2000US-00714185.

XX 20-DEC-2000; 2000US-0256458P.

XX 09-AUG-2001; 2001US-0311625P.

XX (AURO-) AUROX LLC.

XX (KIRI) KIRIN BEER KK.

XX Robl JM, Goldsby RA, Ferguson SE, Kuroiwa Y, Tomizuka K;

XX Ishida I;

XX WPI; 2002-698746/75.

XX New transgenic ungulates comprising nucleic acids encoding a xenogenous
PT immunoglobulin (Ig) that undergoes rearrangement and expresses xenogenous
PT Ig molecules, useful for producing antibodies for prophylaxis of
PT infectious diseases.

XX Example 2; Page 59; 132pp; English.

XX The invention comprises a transgenic ungulate containing a xenogenous
CC immunoglobulin gene which undergoes rearrangement and expresses more than
CC one xenogenous immunoglobulin molecule. The transgenic ungulates of the
CC invention are useful for producing antibodies that are useful for
CC prophylaxis/treatment of infectious diseases, modulation of the immune
CC system, removal of cancer cells and modulation of specific human
CC molecules. The present DNA sequence represents a PCR primer that was used
CC in an example of the invention

XX Sequence 23 BP; 3 A; 4 C; 11 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 23;
Best Local Similarity 85.7%; Pred. No. 1.4e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 854 AGGAGGAGCTGGTGGAGGCTG 874

DB 2 AGGTGAGCTGGTGGAGTCTG 22

RESULT 947
ABT11947

XX ABT11947 standard; DNA; 23 BP.

XX ABT11947;

XX DT 19-DEC-2002 (first entry)

XX Human immunoglobulin heavy chain PCR primer #14.

XX Human; PCR; primer; ss; transgenic ungulate; xenogenous immunoglobulin;
KW infectious disease; cancer cell removal.

XX

CC secretory leader sequence, tag, at least two restriction endonuclease
 CC cleavage sites, and a component of a secreted replicable genetic display
 CC package (RGDP) which, when expressed in frame in a recombinant host
 CC organism, causes the RGDP to display at the surface of the package, the
 CC tag and any polypeptide encoded 3' of the tag. The method of the
 CC invention is also useful for producing a member of SPP (specific binding
 CC pair) where the recombinant DNA construct is expressed in recombinant
 CC host organism or recombinant host cells. The recombinant host organism or
 CC host cells are infected with a helper phage and the method involves
 CC isolating the RGDPs displaying the tag. The method is useful for
 CC manufacturing a phage display library where several recombinant DNA
 CC constructs prepared using several DNA sequences for components of
 CC specific binding pairs, are employed. Members (antibodies or their
 CC antigen binding fragments, or scfv fragments) of SPP identified have
 CC therapeutic or diagnostic applications. The coding sequence may be
 CC determined and synthesised in bulk for use as diagnostic or therapeutic
 CC agent for treating infection. The SPP members are also useful for
 CC isolating and purifying their complementary binding partners which are
 CC used in vaccination. They are also used in epitope mapping, etc. The SPP
 CC sequences are used for preparing a library of database of sequences, e.g.
 CC the CDR3 region of antibodies and antigen binding fragments are useful
 CC for determining the identity of the antigen bound by the antibody or its
 CC fragment. This library can be examined to determine the identity of
 CC conserved sequences and to identify members of SPPs which are good
 CC therapeutic or diagnostic agents. The present sequence is a PCR primer
 CC used in the generation of human scfv antibodies

XX
 SQ Sequence 23 BP; 3 A; 4 C; 11 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16.2; DB 1; Length 23;
 Best Local Similarity 85.7%; Pred. No. 1.4e+03;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 854 AGGAGGAGCTGGTGGAGGCTG 874
 |||||
 Db 2 AGGTGCAGCTGGTGGAGTCTG 22

RESULT 950
 ACA94758
 ID ACA94758 standard; DNA; 23 BP.

AC ACA94758;

XX 21-JUL-2003 (first entry)

XX Human single chain variable fragment PCR primer #2.

XX Single chain monoclonal antibody; cytostatic; virucide; anti-HIV;
 KW hepatotropic; antiinflammatory; gene therapy; DNA construct library;
 KW transcription; transcriptional activator; antigen binding domain;
 KW immunoglobulin; endogenous transcriptional associated regulatory protein;
 KW affinity purification; drug screening; physiological disorder; cancer;
 KW viral infection; hepatitis; respiratory syncytial virus; RSV; HIV;
 KW Junin virus; herpes simplex virus; rubella; Varicella-Zoster virus;
 KW measles; dengue virus; Ebola virus; PCR; primer; ss.

XX Homo sapiens.

XX US2003017149-A1.

XX 23-JAN-2003.

XX 28-AUG-2001; 2001US-00939769.

XX 10-OCT-1996; 96US-00728890.

XX (HOEF/) HOFFLER J P.
 XX (RUSS/) RUSSELL M.

XX Hoeffler JP, Russell M;

XX WPI; 2003-428947/40.

XX

PT Screening a DNA construct library for single chain monoclonal antibody
 PT fusion reagents for regulating transcription in vivo, by using constructs
 PT expressing antigen binding domains that target transcriptional
 PT activators.

XX Claim 23; Page 15; 52pp; English.

XX The invention describes a method of screening a DNA construct library for
 CC a single chain monoclonal antibody fusion reagent capable of binding a
 CC transcriptional associated biomolecule in vivo comprising employing the
 CC activity of a transcriptional activator by using constructs that express
 CC antigen binding domains of immunoglobulins to target endogenous
 CC transcriptional associated regulatory proteins. The method is useful for
 CC screening a DNA construct library for single chain monoclonal antibody
 CC fusion reagents capable of binding a transcriptional associated
 CC biomolecule in vivo, or capable of regulating transcription in vivo. The
 CC identified single chain monoclonal antibody fusion reagents are useful in
 CC affinity purification, drug screening, gene therapy (particularly for
 CC regulating the transcription of a gene in vivo), or in diagnosing a
 CC physiological disorder manifested by abnormal levels of transcription
 CC associated biomolecules. The single chain monoclonal antibody fusion
 CC reagents may be used for treating or diagnosing cancer or viral
 CC infections (e.g. hepatitis A or B, respiratory syncytial virus (RSV),
 CC HIV, Junin virus, herpes simplex virus, rubella, Varicella-Zoster virus,
 CC measles, dengue virus or Ebola virus infections). This sequence
 CC represents a primer used to isolate human single chain antibody variable
 CC fragments for used in the creation of a human single chain variable
 CC fragment library

XX Sequence 23 BP; 3 A; 4 C; 11 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 23;
 Best Local Similarity 85.7%; Pred. No. 1.4e+03;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 854 AGGAGGAGCTGGTGGAGGCTG 874

|||||
 Db 2 AGGTGCAGCTGGTGGAGTCTG 22

RESULT 951

ACA94762

ID ACA94762 standard; DNA; 23 BP.

AC ACA94762;

XX 21-JUL-2003 (first entry)

XX Human single chain variable fragment PCR primer #6.

XX Single chain monoclonal antibody; cytostatic; virucide; anti-HIV;
 KW hepatotropic; antiinflammatory; gene therapy; DNA construct library;
 KW transcription; transcriptional activator; antigen binding domain;
 KW immunoglobulin; endogenous transcriptional associated regulatory protein;
 KW affinity purification; drug screening; physiological disorder; cancer;
 KW viral infection; hepatitis; respiratory syncytial virus; RSV; HIV;
 KW Junin virus; herpes simplex virus; rubella; Varicella-Zoster virus;
 KW measles; dengue virus; Ebola virus; PCR; primer; ss.

XX Homo sapiens.

XX US2003017149-A1.

XX 23-JAN-2003.

XX 28-AUG-2001; 2001US-00939769.

XX 10-OCT-1996; 96US-00728890.

XX (HOEF/) HOFFLER J P.
 XX (RUSS/) RUSSELL M.

XX

PI Hoeffler JP, Russell M;
 XX WPI; 2003-428947/40.
 XX
 PT Screening a DNA construct library for single chain monoclonal antibody
 PT fusion reagents for regulating transcription in vivo, by using constructs
 PT expressing antigen binding domains that target transcriptional
 PT activators.
 XX
 PS Disclosure; Page 15; 52pp; English.
 XX
 CC The invention describes a method of screening a DNA construct library for
 CC a single chain monoclonal antibody fusion reagent capable of binding a
 CC transcriptional associated biomolecule in vivo comprising employing the
 CC activity of a transcriptional activator by using constructs that express
 CC antigen binding domains of immunoglobulins to target endogenous
 CC transcriptional associated regulatory proteins. The method is useful for
 CC screening a DNA construct library for single chain monoclonal antibody
 CC fusion reagents capable of binding a transcriptional associated
 CC biomolecule in vivo, or capable of regulating transcription in vivo. The
 CC identified single chain monoclonal antibody fusion reagents are useful in
 CC affinity purification, drug screening, gene therapy (particularly for
 CC regulating the transcription of a gene in vivo), or in diagnosing a
 CC physiological disorder manifested by abnormal levels of transcription
 CC associated biomolecules. The single chain monoclonal antibody fusion
 CC reagents may be used for treating or diagnosing cancer or viral
 CC infections (e.g. hepatitis A or B, respiratory syncytial virus (RSV),
 CC HIV, Junin virus, herpes simplex virus, rubella, Varicella-Zoster virus,
 CC measles, dengue virus or Ebola virus infections). This sequence
 CC represents a primer used to isolate human single chain antibody variable
 CC fragments for used in the creation of a human single chain variable
 CC fragment library
 XX
 SQ Sequence 23 BP; 3 A; 4 C; 11 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16.2; DB 1; Length 23;
 Best Local Similarity 85.7%; Pred. No. 1.4e+03;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 854 AGCAGGAGCTGGTGGAGGCTG 874
 DB 2 AGGTGACGCTGGTGGAGTCTG 22
 RESULT 952
 ACC48959
 ID ACC48959 standard; DNA; 23 BP.
 AC
 XX ACC48959;
 DT
 XX 11-AUG-2003 (first entry)
 DE RIPE3b1 peptide-based 3' PCR primer.
 XX
 XX mMafa; mammalian Mafa; transcription factor; RIPE3b1; insulin; diabetes;
 KW antidiabetic; hypotensive; ophthalmological; hypoglycaemic; hamster; PCR;
 KW primer; ss.
 XX
 XX Cricetulus sp.
 OS
 XX WO2003020894-A2.
 PN
 XX 13-MAR-2003.
 PD
 XX 30-AUG-2002; 2002WO-US027600.
 PF
 XX 31-AUG-2001; 2001US-0316453P.
 PR (JOSL-) JOSLIN DIABETES CENT INC.
 XX
 PA Sharma A;
 PI
 XX WPI; 2003-300877/29.
 DR
 XI Novel isolated mammalian insulin related transcription factor
 PT polypeptide, mMafa, useful for treating an insulin-related disorder in a
 PT subject.
 PT
 XX Example 6; Page 137; 170pp; English.
 PS
 XX The present sequence is a 3' primer based on a RIPE3b1 PCR product
 CC obtained from hamster insulinoma HIT T-15 cells. The primer was used in
 CC the cloning of human mMafa cDNA (see ACC48953). mMafa (see also ABR42043)
 CC is a novel insulin gene transcription factor. A claimed method of
 CC treating an insulin-related disorder comprises increasing the level,
 CC expression or activity of a Maf protein, especially mMafa, in a subject.
 CC The insulin-related disorder is diabetes, hypertension, retinopathy,
 CC persistent hyperinsulinaemic hypoglycaemia of infancy (PHHI), insulin
 CC resistance, hyperglycaemia, glucose intolerance or glucotoxicity (all
 CC claimed)
 XX
 SQ Sequence 23 BP; 3 A; 12 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16.2; DB 1; Length 23;
 Best Local Similarity 85.7%; Pred. No. 1.4e+03;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2103 CACCCCCAGCTCCAGCTCTC 2123
 DB 3 CACCTCCAGCTTCAGCTGCTC 23
 RESULT 953
 ABT43625
 ID ABT43625 standard; DNA; 23 BP.
 AC
 XX ABT43625;
 DT
 XX 16-OCT-2003 (first entry)
 DE PCR primer HuVH3ABACK related to human VH and VL antibody fragments.
 XX
 KW Human complementarity-determining region 3; CDR3; microorganism;
 KW infection; vaccine; heavy chain variable region; VH; parasitic;
 KW light chain variable region; VL; B cell; antibacterial; virucidal;
 KW fungicidal; anti-HIV; antiparasitic; antibody; HIV; bacterial; viral;
 KW yeast; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO2003052416-A2.
 PN
 XX 26-JUN-2003.
 PD
 XX 16-DEC-2002; 2002WO-GB005690.
 PF
 XX 19-DEC-2001; 2001GB-00030267.
 PR (NEUT-) NEUTEC PHARMA PLC.
 PA
 XX Burnie JP, Matthews RC, Rigg GP, Williamson P;
 PI
 XX WPI; 2003-523552/49.
 DR
 XX Identifying candidate sequences of antibodies specific against at least 1
 PT antigen produced by a microorganism during an infection or against a
 PT vaccine, useful for treating e.g. HIV, bacterial, viral, or parasitic
 PT infections.
 XX
 PS Disclosure; Page 38; 65pp; English.
 XX
 CC This invention relates to a novel method for the identification of
 CC candidate sequences of at least the complementarity-determining region 3
 CC (CDR3) of antibodies specific against at least 1 antigen produced by a
 CC microorganism during an infection or against a vaccine. The method
 CC comprises initially the sequencing at least the complementarity

CC The invention relates to a novel polynucleotide isolated and purified
 CC from a human gene having any one of 935 fully defined sequences as given
 CC in specification, or a sequence having a base substitution. The invention
 CC further relates to: an oligonucleotide containing single nucleotide
 CC polymorphisms; a PCR primer set chosen from the combination of two DNA
 CC fragments from any one of 1220 fully defined sequences as given in
 CC specification; a labelling probe containing the SNP containing oligo; and
 CC a microarray equipped with the SNP containing oligo. The isolated human
 CC gene of the invention is useful for detecting the single nucleotide
 CC polymorphisms in human gene. The isolated human gene is also useful for
 CC diagnosis of disease and determination of side effect to a medical agent.
 CC The isolated human gene is also effective in detecting single nucleotide
 CC polymorphisms in a human gene. This polynucleotide sequence represents
 CC one of the PCR primers used in the single nucleotide polymorphism
 CC detection method of the invention.

XX
 SQ Sequence 23 BP; 10 A; 9 C; 2 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16.2; DB 1; Length 23;
 Best Local Similarity 85.7%; Pred. No. 1.4e+03;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2331 GTGCGTGTGTGTGTGTGTG 2351
 DB 23 GTGCATATGTGTGTGTGTG 3
 |||||
 |||||

RESULT 956
 ABX90512/C
 ID ABX90512 standard; DNA; 23 BP.
 XX AC ABX90512;
 AC ABX90512;
 DT 01-MAY-2003 (first entry)
 XX
 DE Human VEGFR-2 RT-PCR primer #2.
 XX Antisense; ss; PCR; VEGF; vascular endothelial growth factor; human;
 KW cancer; angiogenesis; neoplastic proliferation; cellular proliferation;
 KW primer; RT-PCR; reverse transcriptase PCR.
 XX Homo sapiens.
 OS
 XX US2002165174-A1.
 PN
 XX 07-NOV-2002.
 PD
 XX 13-MAR-2001; 2001US-00805761.
 PF
 XX 31-JAN-1997; 97US-0037004P.
 PR 30-JAN-1998; 98US-00016541.
 PR 19-JAN-2000; 2000US-00487023.
 PR 19-JAN-2001; 2001WO-US0000019.
 XX (GILL/) GILL P S.
 PA (MASO/) MASOOD R.
 PI Gill PS, Masood R;
 XX WPI; 2003-255224/25.
 DR
 XX New composition comprising an antisense oligonucleotide directed against
 PT vascular endothelial growth factor, useful for preparing a composition
 PT for treating cancer.
 XX Example 12; Page 19; 54pp; English.
 PS
 XX The invention relates to a composition comprising an antisense
 CC oligonucleotide directed against vascular endothelial growth factor
 CC (VEGF). The antisense oligonucleotide is useful for preparing a
 CC composition treating cancer, neoplastic proliferation, abnormal cellular
 CC proliferation and preventing angiogenesis. The present sequence is a
 CC reverse transcriptase (RT)-PCR primer for a VEGF or related gene, used to

CC clone the coding region for expression in tumour cell lines. The cell
 CC lines were used to test prospective antisense oligonucleotides

XX
 SQ Sequence 23 BP; 4 A; 7 C; 7 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16.2; DB 1; Length 23;
 Best Local Similarity 85.7%; Pred. No. 1.4e+03;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1950 GATCATGCGGAGTGTGCA 1970
 DB 21 GACCATGTGGAGTGTGCA 1
 |||||
 |||||

RESULT 957
 AD182211
 ID AD182211 standard; DNA; 23 BP.
 XX AC AD182211;
 AC AD182211;
 DT 22-APR-2004 (first entry)
 XX
 DE RTQ PCR probe for Human SLC6A8.
 XX Human; ss; PCR; embryonic stem cell; pluripotent stem cell;
 KW abnormal cell growth; malignancy; differentiation; probe; RTQ-PCR;
 KW realtime quantitative PCR.
 XX Homo sapiens.
 OS
 XX US2003224411-A1.
 PN
 XX 04-DEC-2003.
 PD
 XX 13-MAR-2003; 2003US-00388578.
 PF
 XX 13-MAR-2003; 2003US-00388578.
 PR
 XX (STAN/) STANTON L W.
 PA (BRAN/) BRANDENBERGER R.
 PA (GOLD/) GOLD J D.
 PA (IRVI/) IRVING J M.
 PA (MAND/) MANDALAM R.
 PA (MOKM/) MOK M.
 PA (SHEL/) SHELTON D.
 XX Stanton LW, Brandenberger R, Gold JD, Irving JM, Mandalam R;
 PI Mok M, Shelton D;
 PI WPI; 2004-119701/12.
 DR
 XX Assessing culture of undifferentiated primate pluripotent stem cells by
 PT detecting expression of markers e.g., Zic family member 3, other than
 PT human telomerase reverse transcriptase/octamer binding transcription
 PT factor.
 XX Example 4; SEQ ID NO 41; 106pp; English.
 PS
 XX The invention relates to assessing a culture of undifferentiated primate
 CC pluripotent stem cells (pPS, e.g. embryonic stem cells), involving
 CC detecting expression of markers (MR1) e.g. Zic family member 3 (ZIC3), as
 CC given in specification, other than human telomerase reverse transcriptase
 CC (hTERT) or octamer binding transcription factor (Oct) 3/4, or a marker
 CC (MR2) such as crypto or podocalyxin-like protein and hTERT and/or Oct3/4
 CC or second marker chosen from (MR2). Also included are maintaining (M2)
 CC pPS cells in a pluripotent state (involves causing them to express one of
 CC the following markers (MR3) at a higher level, FOXO1A, ZIC3, hypothetical
 CC protein FLJ20582, Forkhead box H1 (FOXH1), Zinc finger protein, Hsa12,
 CC KRAB-zinc finger protein SZF1-1 or zinc finger protein of cerebellum
 CC ZIC2, or any other marker (MR4) chosen from PHD protein Jade-1 (Jade-1),
 CC kruppel-like zinc finger protein (ZNF300), etc., as given in the
 CC specification), causing pPS cells to differentiate into a particular
 CC tissue type by causing them to express one of the markers chosen from

| | | | | | |
|-----------------------|-------------|---|--------------------|-------|---------------------------------|
| Query Match | | 0.4%; | Score 16.2; | DB 1; | Length 23; |
| Best Local Similarity | | 85.7%; | Pred. No. 1.4e+03; | | |
| Matches | | 18; | Conservative | 0; | Mismatches 3; Indels 0; Gaps 0; |
| QY | 854 | AGGAGGAGCTGGTGGAGGCTG | 874 | | |
| | | | | | |
| Db | 2 | AGGTGCAGCTGGTGGAGTCTG | 22 | | |
| RESULT 960 | | | | | |
| ID | ACH01336 | standard; DNA; 23 BP. | | | |
| XX | ACH01336; | | | | |
| AC | ACH01336; | | | | |
| XX | 22-APR-2004 | (first entry) | | | |
| DT | XX | | | | |
| DE | XX | Transgenic bovine locus human heavy chain locus PCR primer #9. | | | |
| XX | XX | Cow; ungulate; human; immunoglobulin; Ig; antibody; transgenic; PCR; | | | |
| KW | XX | primer; ss. | | | |
| XX | OS | Homo sapiens. | | | |
| OS | XX | WO2003097812-A2. | | | |
| PN | XX | 27-NOV-2003. | | | |
| PD | XX | | | | |
| PF | XX | 19-MAY-2003; 2003WO-US015937. | | | |
| PP | XX | 17-MAY-2002; 2002US-0381531P. | | | |
| PR | XX | 08-NOV-2002; 2002US-0425056P. | | | |
| PR | XX | (HEMA-) HEMATECH LLC. | | | |
| XX | PA | (KIRI) KIRIN BEER KK. | | | |
| XX | PI | Robl JM, Collas P, Sullivan E, Kasinathan P, Goldsby RA; | | | |
| XX | PI | Kuroiwa Y, Tomizuka K, Ishida I; | | | |
| XX | XX | WPI; 2004-022868/02. | | | |
| DR | XX | New transgenic ungulate comprising one or more nucleic acids encoding all | | | |
| XX | XX | or part of a xenogenous immunoglobulin (Ig) gene, useful in producing | | | |
| PT | PT | large quantities of xenogenous antibodies, e.g., human antibodies. | | | |
| PT | XX | Example 1; Page 79; Opp; English. | | | |
| XX | XX | The present invention relates to a new transgenic ungulate which | | | |
| CC | CC | comprises one or more nucleic acids encoding all or part of a xenogenous | | | |
| CC | CC | immunoglobulin (Ig) gene which undergoes rearrangement and expresses more | | | |
| CC | CC | than one xenogenous Ig protein. The transgenic ungulate is useful in | | | |
| CC | CC | producing large quantities of xenogenous antibodies, e.g., human | | | |
| CC | CC | antibodies. The present sequence is a PCR primer used in the | | | |
| CC | CC | exemplification of the invention | | | |
| XX | XX | Sequence 23 BP; 3 A; 4 C; 11 G; 5 T; 0 U; 0 Other; | | | |
| SQ | | | | | |
| Query Match | | 0.4%; | Score 16.2; | DB 1; | Length 23; |
| Best Local Similarity | | 85.7%; | Pred. No. 1.4e+03; | | |
| Matches | | 18; | Conservative | 0; | Mismatches 3; Indels 0; Gaps 0; |
| QY | 854 | AGGAGGAGCTGGTGGAGGCTG | 874 | | |
| | | | | | |
| Db | 2 | AGGTGCAGCTGGTGGAGTCTG | 22 | | |
| RESULT 961 | | | | | |
| ID | ADO36078 | standard; DNA; 23 BP. | | | |
| XX | ADO36078 | | | | |
| AC | ADO36078; | | | | |
| XX | XX | | | | |

| | | |
|----|---|------------------------------------|
| DT | 12-AUG-2004 | (first entry) |
| XX | Human Cmu and VH rearrangement related PCR primer SEQ ID NO:11. | |
| DE | | |
| XX | | |
| KW | bovine; non-naturally occurring mutation; mutation; prion protein; | |
| KW | mutant prion protein; antibody; immunoglobulin; Ig; agricultural; | |
| KW | prion-related disease; bovine spongiform encephalopathy; mad cow disease; | |
| KW | BSE; PCR; primer; ss. | |
| XX | | |
| OS | Homo sapiens. | |
| OS | Synthetic. | |
| PN | WO2004044156-A2. | |
| XX | | |
| PD | 27-MAY-2004. | |
| XX | | |
| PF | 10-NOV-2003; 2003WO-US035720. | |
| XX | | |
| PR | 08-NOV-2002; 2002US-0425056P. | |
| PR | 26-SEP-2003; 2003US-0506901P. | |
| XX | | |
| PA | (HEMA-) HEMATECH LLC. | |
| PA | (KIRI) KIRIN BREWERY KK. | |
| XX | | |
| PI | Robl J, Kuroiwa Y, Collas P, Sullivan E, Kasinathan P; | |
| PI | Tomizuka K, Ishida I; | |
| XX | | |
| XX | WPI; 2004-420302/39. | |
| DR | | |
| XX | Novel transgenic bovine or bovine cell comprising non-naturally occurring | |
| PT | mutation in one or both alleles of endogenous prion nucleic acid, useful | |
| PT | as safe source of agricultural products and human antibodies for | |
| PT | pharmaceutical use. | |
| XX | | |
| XX | Example 2; SEQ ID NO 11; 307pp; English. | |
| PS | | |
| XX | The present invention describes a bovine (I) or a bovine cell (II), | |
| CC | comprising a non-naturally occurring mutation in one or both alleles of | |
| CC | an endogenous prion nucleic acid. Also described: (1) a hybridoma (III) | |
| CC | formed from the fusion of (II) with myeloma cell; (2) producing (M1) (I); | |
| CC | (3) producing (M2) (II); and (4) a nucleic acid (IV) comprising a | |
| CC | cassette which includes in 5'-3' order a first region of homology having | |
| CC | substantial sequence identity to a first region of an endogenous prion | |
| CC | nucleic acid of a bovine cell, positive selection marker and second | |
| CC | region of homology having substantial sequence identity to a second | |
| CC | region of prion nucleic acid, first region of homology is longer than | |
| CC | second region of homology, where the cassette is capable of integrating | |
| CC | into an endogenous prion nucleic acid of cell. (I) is useful for | |
| CC | producing antibodies, which involves administering one or more antigens | |
| CC | of interest to (I) comprising nucleic acid encoding a xenogenous antibody | |
| CC | gene locus, the nucleic acid segments in gene locus undergo rearrangement | |
| CC | resulting in the production of antibodies specific for the antigen and | |
| CC | recovering xenogenous antibodies from (I). The antibodies are monoclonal | |
| CC | or polyclonal antibodies. The antibodies are recovered from the serum or | |
| CC | milk of bovine. The immunoglobulins (Igs) are directed against a desired | |
| CC | antigen. (I) is useful as source of agricultural products and source of | |
| CC | human antibodies for pharmaceutical use. (II) is a safe source of | |
| CC | agricultural products and as human antibodies for pharmaceutical use, as | |
| CC | (I) has resistance to prion-related disease such as bovine spongiform | |
| CC | encephalopathy (mad cow disease). The present sequence represents a PCR | |
| CC | primer used in the introduction and rearrangement of HAC, which is used | |
| CC | in an example from the present invention. | |
| XX | | |
| SQ | Sequence 23 BP; 3 A; 4 C; 11 G; 5 T; 0 U; 0 Other; | |
| | | |
| | Query Match | 0.4%; |
| | Best Local Similarity | 85.7%; |
| | Matches | 18; Conservative |
| | | 0; Mismatches 3; Indels 0; Gaps 0; |
| QY | 854 | AGGAGGAGCTGGTGGAGGCTG 874 |
| | | |
| Db | 2 | AGGTGCAGCTGGTGGAGTCTG 22 |


```

Db      39 GGTGTTTTTTTTTTTTTTTTTTTTTTTCAG 11

RESULT 966
AAQ33743
ID   AAQ33743 standard; DNA; 16 BP.
XX
AC   AAQ33743;
XX
AC   25-MAR-2003 (revised)
XX
DT   02-FEB-1993 (first entry)
XX
DE   Microsatellite sequence from clone TGLA158.
XX
KW   PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
XX   genetic mapping; traits; amplification; ss.
XX
OS   Bos taurus.
XX
PN   WO9213102-A1.
XX
PD   06-AUG-1992.
XX
PF   15-JAN-1992; 92WO-US000340.
XX
PR   15-JAN-1991; 91US-00642342.
XX
PA   (GENM-) GENMARK.
XX
PI   Georges M, Massey JM;
XX
DR   WPI; 1992-284684/34.
XX
PT   Polymorphic bovine DNA markers - used in genetic identification, gene
XX   mapping, and selective breeding.
XX
PS   Table 7; Page 227; 517pp; English.
XX
CC   The sequence is that of a bovine microsatellite sequence obtd. by
CC   screening a library of bovine MboI DNA fragments of between 250 and 500
CC   bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
CC   clones cross-hybridised. Assuming independent distribution of
CC   microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
CC   in the bovine genome is estimated at >100,000. The sequence information
CC   for ca. 230 such bovine microsatellites is summarised in the
CC   specification and indexed herein (see below). The sequences upstream and
CC   downstream of the microsatellite sequence were used to generate the
CC   required PCR primers for in vitro amplification of the corresp.
CC   microsatellite (using the program OPTIPRIM). The microsatellites may be
CC   used to identify individuals, for parentage testing, and in the genetic
CC   mapping of economic trait loci, or genes involved the determinism of
CC   economically important traits esp. in cattle, to allow selective
CC   breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
CC   field.)
XX
SQ   Sequence 16 BP; 0 A; 0 C; 8 G; 8 T; 0 U; 0 Other;

Query Match      0.4%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2318 TGTGTGTGTGTGTGTGT 2333
Db      1 TGTGTGTGTGTGTGTG 16

RESULT 967
AAQ33749
ID   AAQ33749 standard; DNA; 16 BP.
XX
AC   AAQ33749;
XX
XX
DT   25-MAR-2003 (revised)
XX
DE   Microsatellite sequence from clone TGLA311.
XX
KW   PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
XX   genetic mapping; traits; amplification; ss.
XX
OS   Bos taurus.
XX
PN   WO9213102-A1.

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DT   02-FEB-1993 (first entry)
XX
DE   Microsatellite sequence from clone TGLA160.
XX
KW   PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
XX   genetic mapping; traits; amplification; ss.
XX
OS   Bos taurus.
XX
PN   WO9213102-A1.
XX
PD   06-AUG-1992.
XX
PF   15-JAN-1992; 92WO-US000340.
XX
PR   15-JAN-1991; 91US-00642342.
XX
PA   (GENM-) GENMARK.
XX
PI   Georges M, Massey JM;
XX
DR   WPI; 1992-284684/34.
XX
PT   Polymorphic bovine DNA markers - used in genetic identification, gene
XX   mapping, and selective breeding.
XX
PS   Table 7; Page 229; 517pp; English.
XX
CC   The sequence is that of a bovine microsatellite sequence obtd. by
CC   screening a library of bovine MboI DNA fragments of between 250 and 500
CC   bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
CC   clones cross-hybridised. Assuming independent distribution of
CC   microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
CC   in the bovine genome is estimated at >100,000. The sequence information
CC   for ca. 230 such bovine microsatellites is summarised in the
CC   specification and indexed herein (see below). The sequences upstream and
CC   downstream of the microsatellite sequence were used to generate the
CC   required PCR primers for in vitro amplification of the corresp.
CC   microsatellite (using the program OPTIPRIM). The microsatellites may be
CC   used to identify individuals, for parentage testing, and in the genetic
CC   mapping of economic trait loci, or genes involved the determinism of
CC   economically important traits esp. in cattle, to allow selective
CC   breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
CC   field.)
XX
SQ   Sequence 16 BP; 0 A; 0 C; 8 G; 8 T; 0 U; 0 Other;

Query Match      0.4%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2335 GTGTGTGTGTGTGTGT 2350
Db      1 GTGTGTGTGTGTGTGT 16

RESULT 968
AAQ33903
ID   AAQ33903 standard; DNA; 16 BP.
XX
AC   AAQ33903;
XX
XX
DT   25-MAR-2003 (revised)
XX
DT   02-FEB-1993 (first entry)
XX
DE   Microsatellite sequence from clone TGLA311.
XX
KW   PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
XX   genetic mapping; traits; amplification; ss.
XX
OS   Bos taurus.
XX
PN   WO9213102-A1.

```

XX PD 06-AUG-1992.
 XX PF 15-JAN-1992; 92WO-US000340.
 XX PR 15-JAN-1991; 91US-00642342.
 XX PA (GENM-) GENMARK.
 XX PI Georges M, Massey JM;
 DR WPI; 1992-284684/34.
 XX PT Polymorphic bovine DNA markers - used in genetic identification, gene
 mapping, and selective breeding.
 XX PS Table 7; Page 291; 517pp; English.
 XX SQ The sequence is that of a bovine microsatellite sequence obt'd. by
 screening a library of bovine MbOI DNA fragments of between 250 and 500
 bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
 clones cross-hybridised. Assuming independent distribution of
 microsatellites and MbOI sites, the frequency of (16)n > 9 microsatellites
 in the bovine genome is estimated at >100,000. The sequence information
 for ca. 230 such bovine microsatellites is summarised in the
 specification and indexed herein (see below). The sequences upstream and
 downstream of the microsatellite sequence were used to generate the
 required PCR primers for in vitro amplification of the corresp.
 microsatellite (using the program OPRIPRIM). The microsatellites may be
 used to identify individuals, for parentage testing, and in the genetic
 mapping of economic trait loci, or genes involved in the determination of
 economically important traits esp. in cattle, to allow selective
 breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
 field.)
 XX SQ Sequence 16 BP; 0 A; 0 C; 8 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2335 GTGTGTGTGTGTGTGT 2350
 DB 1 GTGTGTGTGTGTGTGT 16
 RESULT 969
 AAQ68236/c
 ID AAQ68236 standard; RNA; 16 BP.
 AC AAQ68236;
 XX 25-MAR-2003 (revised)
 DT 16-FEB-1995 (first entry)
 XX Purine-pyrimidine contg. ribooligonucleoside R138.
 XX Purine; pyrimidine; methylphosphonate; MP; triple helix; translation;
 XX oligonucleoside; ss.
 XX Synthetic.
 XX WO9413326-A1.
 XX 23-JUN-1994.
 XX 08-DEC-1993; 93WO-US011986.
 XX 08-DEC-1992; 92US-00987746.
 XX (GENT-) GENTA INC.
 XX Arnold LJ, Reynolds MA;
 XX WPI; 1994-217542/26.
 XX Detection, recognition, inhibition and alteration of single and double
 stranded target nucleic acid sequences - by formation of a triple helix
 structure using 2 oligomers which block translation.
 XX Example 2; Page 37; 517pp; English.
 XX Two sets of methylphosphonate oligonucleosides ("MP oligomers") and
 complementary ribooligonucleosides ("RNA oligomers") contg. alternating
 purines and pyrimidines were examined for their ability to form triple
 helix complexes. (Set 1: G2019 and R138; Set 2: G2018 and R139 - see
 AAQ68235-38). It was shown that MP oligomers contg. alternating purines
 and pyrimidines are capable of forming triple stranded complexes with
 complementary RNA oligomers. (Updated on 25-MAR-2003 to correct PN
 field.)

XX WPI; 1994-217542/26.
 XX Detection, recognition, inhibition and alteration of single and double
 stranded target nucleic acid sequences - by formation of a triple helix
 structure using 2 oligomers which block translation.
 XX Example 2; Page 37; 67pp; English.
 XX Two sets of methylphosphonate oligonucleosides ("MP oligomers") and
 complementary ribooligonucleosides ("RNA oligomers") contg. alternating
 purines and pyrimidines were examined for their ability to form triple
 helix complexes. (Set 1: G2019 and R138; Set 2: G2018 and R139 - see
 AAQ68235-38). It was shown that MP oligomers contg. alternating purines
 and pyrimidines are capable of forming triple stranded complexes with
 complementary RNA oligomers. (Updated on 25-MAR-2003 to correct PN
 field.)
 XX SQ Sequence 16 BP; 8 A; 8 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2318 TGTGTGTGTGTGTGTG 2333
 DB 16 TGTGTGTGTGTGTGTG 1
 RESULT 970
 AAQ68235
 ID AAQ68235 standard; DNA; 16 BP.
 AC AAQ68235;
 XX 25-MAR-2003 (revised)
 DT 16-FEB-1995 (first entry)
 XX Purine-pyrimidine contg. methylphosphonate oligonucleoside G2019.
 XX Purine; pyrimidine; methylphosphonate; MP; triple helix; translation;
 XX oligonucleoside; ss.
 XX Synthetic.
 XX WO9413326-A1.
 XX 23-JUN-1994.
 XX 08-DEC-1993; 93WO-US011986.
 XX 08-DEC-1992; 92US-00987746.
 XX (GENT-) GENTA INC.
 XX Arnold LJ, Reynolds MA;
 XX WPI; 1994-217542/26.
 XX Detection, recognition, inhibition and alteration of single and double
 stranded target nucleic acid sequences - by formation of a triple helix
 structure using 2 oligomers which block translation.
 XX Example 2; Page 37; 67pp; English.
 XX Two sets of methylphosphonate oligonucleosides ("MP oligomers") and
 complementary ribooligonucleosides ("RNA oligomers") contg. alternating
 purines and pyrimidines were examined for their ability to form triple
 helix complexes. (Set 1: G2019 and R138; Set 2: G2018 and R139 - see
 AAQ68235-38). It was shown that MP oligomers contg. alternating purines
 and pyrimidines are capable of forming triple stranded complexes with
 complementary RNA oligomers. (Updated on 25-MAR-2003 to correct PN
 field.)

```
XX SQ Sequence 16 BP; 0 A; 0 C; 8 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2335 GTGTGTGTGTGTGTGT 2350
DB 1 GTGTGTGTGTGTGTGT 16

RESULT 971
AAQ68238
ID AAQ68238 standard; RNA; 16 BP.
XX AC AAQ68238;
XX DT 25-MAR-2003 (revised)
XX DT 16-FEB-1995 (first entry)
XX DE Purine-pyrimidine contg. ribooligonucleoside R139.
XX KW Purine; pyrimidine; methylphosphonate; MP; triple helix; translation;
XX OS oligonucleoside; ss.
XX OS Synthetic.
XX PN WO9413326-A1.
XX PD 23-JUN-1994.
XX PF 08-DEC-1993; 93WO-US011986.
XX PR 08-DEC-1992; 92US-00987746.
XX PA (GENT-) GENTA INC.
XX PI Arnold LJ, Reynolds MA;
XX DR WPI; 1994-217542/26.
XX PT Detection, recognition, inhibition and alteration of single and double
XX PT stranded target nucleic acid sequences - by formation of a triple helix
XX PT structure using 2 oligomers which block translation.
XX PS Example 2; Page 37; 67pp; English.
XX CC Two sets of methylphosphonate oligonucleosides ("MP oligomers") and
XX CC complementary ribooligonucleosides ("RNA oligomers") contg. alternating
XX CC purines and pyrimidines were examined for their ability to form triple
XX CC helix complexes. (Set 1:G2019 and R138; Set 2:G2018 and R139 - see
XX CC AAQ68235-38). It was shown that MP oligomers contg. alternating purines
XX CC and pyrimidines are capable of forming triple stranded complexes with
XX CC complementary RNA oligomers. (Updated on 25-MAR-2003 to correct PN
XX CC field.)
XX SQ Sequence 16 BP; 0 A; 0 C; 8 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 16; Conservative 8; Mismatches 0; Indels 0; Gaps 0;

QY 2318 TGTTGTGTGTGTGTGTG 2333
DB 1 UGUGUGUGUGUGUGUG 16

RESULT 972
AAQ68237/C
ID AAQ68237 standard; DNA; 16 BP.
XX AC AAQ68237;
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```
XX DT 25-MAR-2003 (revised)
XX DT 16-FEB-1995 (first entry)
XX DE Purine-pyrimidine contg. methylphosphonate oligonucleoside G2018.
XX KW Purine; pyrimidine; methylphosphonate; MP; triple helix; translation;
XX KW oligonucleoside; ss.
XX OS Synthetic.
XX PN WO9413326-A1.
XX PD 23-JUN-1994.
XX PF 08-DEC-1993; 93WO-US011986.
XX PR 08-DEC-1992; 92US-00987746.
XX PA (GENT-) GENTA INC.
XX PI Arnold LJ, Reynolds MA;
XX DR WPI; 1994-217542/26.
XX PT Detection, recognition, inhibition and alteration of single and double
XX PT stranded target nucleic acid sequences - by formation of a triple helix
XX PT structure using 2 oligomers which block translation.
XX PS Example 2; Page 37; 67pp; English.
XX CC Two sets of methylphosphonate oligonucleosides ("MP oligomers") and
XX CC complementary ribooligonucleosides ("RNA oligomers") contg. alternating
XX CC purines and pyrimidines were examined for their ability to form triple
XX CC helix complexes. (Set 1:G2019 and R138; Set 2:G2018 and R139 - see
XX CC AAQ68235-38). It was shown that MP oligomers contg. alternating purines
XX CC and pyrimidines are capable of forming triple stranded complexes with
XX CC complementary RNA oligomers. (Updated on 25-MAR-2003 to correct PN
XX CC field.)
XX SQ Sequence 16 BP; 8 A; 8 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.4%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2335 GTGTGTGTGTGTGTGT 2350
DB 16 GTGTGTGTGTGTGTGT 1

RESULT 973
AAQ66090/C
ID AAT66090 standard; DNA; 16 BP.
XX AC AAT66090;
XX DT 25-MAR-2003 (revised)
XX DT 18-JUN-1997 (first entry)
XX DE Repeat sequence found in ADP/ATP translocase gene.
XX KW Polymorphism; repeat sequence; genetic marker; primer; amplification;
XX KW PCR; polymerase chain reaction; paternity; maternity; human; pedigree;
XX KW linkage analysis; genetic disease; animal; plant; breeding; locus;
XX KW hybridisation; chromosome; ds.
XX OS Homo sapiens.
XX PN US5582979-A.
XX XX 10-DEC-1996.
XX XX
```

PF 04-APR-1994; 94US-00222177.
 XX
 PR 21-APR-1989; 89US-00341562.
 PR 05-SEP-1991; 91US-00754351.
 XX
 PA (MARS-) MARSHFIELD CLINIC.
 XX
 PI Weber JL;
 XX
 DR WPI; 1997-042299/04.
 XX
 PT Detection of polymorphic genetic markers of the form (dC-dA)n(dG-dT)n -
 PT using novel nucleic acid mols. as primers.
 XX
 PS Example 9; Col 59-60; 186pp; English.
 XX
 CC The invention relates to the isolation of polymorphic repeat sequences
 CC having the sequence (dC-dA)n.(dG-dT)n which can be used as genetic
 CC markers. Primers based on these sequences can be used to detect these
 CC repeats, especially for use in e.g. paternity or maternity testing, human
 CC genetic analysis such as linkage analysis of genetic disease, commercial
 CC animal or plant breeding or pedigree analysis. The sequences AAT66084-
 CC T66107 represent repeat sequences of low informativeness found in
 CC specific human genes. This repeat sequence is found in the ADP/ATP
 CC translocase gene. The sequence is amplified by primers AAT66091-2.
 CC (Updated on 25-MAR-2003 to correct PF field.)
 CC
 XX
 SQ Sequence 16 BP; 8 A; 8 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 2318 TGTGTGTGTGTGTGTG 2333
 Db 16 TGTGTGTGTGTGTGTG 1
 RESULT 974
 AAZ98508/C
 ID AAZ98508 standard; DNA; 16 BP.
 AC AAZ98508;
 XX
 DT 19-JUN-2000 (first entry)
 XX
 DE H. discus derived sequence #26.
 XX
 KW Satellite sequence; DNA fragmentation; microsatellite DNA; DNA marker;
 KW Haliotis discus; ss.
 XX
 OS Haliotis discus.
 XX
 PN WO200011156-A1.
 XX
 PD 02-MAR-2000.
 XX
 PF 01-JUL-1999; 99WO-JP003551.
 XX
 PR 18-AUG-1998; 98JP-00232153.
 XX
 PR (NOR) JAPAN MIN AGRIC FORESTRY & FISHERIES.
 PA
 PI Takahashi H, Sekino M;
 XX
 DR WPI; 2000-224692/19.
 XX
 PT Isolation of satellite sequences from genomic DNA for use as DNA markers
 PT comprises isolating a library with high homogeneity by DNA fragmentation.
 XX
 PS Example 5; Page 14; 35pp; Japanese.
 XX
 CC The invention provides a novel method for isolation of satellite

CC sequences from genomic DNA that comprises fragmentation of the DNA by a
 CC method which is not dependent on base sequences, then selection of the
 CC satellite sequences from the obtained genomic library of high
 CC homogeneity. The method is useful for the isolation of microsatellite DNA
 CC sequences which can be used as DNA markers. The new method markedly
 CC improves the efficiency of isolation of satellite sequences in comparison
 CC to prior art methods which are reliant on base sequences. Sequences
 CC AAZ98483-514 represent sequences from Haliotis discus, used in the method
 CC of the invention
 XX
 SQ Sequence 16 BP; 8 A; 8 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 2318 TGTGTGTGTGTGTGTG 2333
 Db 16 TGTGTGTGTGTGTGTG 1
 RESULT 975
 AAS13770
 ID AAS13770 standard; DNA; 16 BP.
 AC AAS13770;
 XX
 DT 08-MAY-2002 (first entry)
 XX
 DE Simple sequence repeat, SSR, #42.
 XX
 KW Simple sequence repeat; plant; ds; SSR; ryegrass; fescue; tandem repeat;
 KW cereal profiling; grass profiling; seed batch purity testing.
 XX
 OS Phalaris aquatica.
 XX
 PN NZ509193-A.
 XX
 PD 25-MAY-2001.
 XX
 PF 03-JAN-2001; 2001NZ-00509193.
 XX
 PR 24-DEC-1999; 99AU-00004906.
 PR 04-MAY-2000; 2000AU-00007310.
 XX
 PA (SAUS-) STATE SOUTH AUSTRALIA SOUTH AUSTRALIAN R.
 PA (UYSC-) UNIV SOUTHERN CROSS
 PA (VICT-) STATE VICTORIA DEPT NATURAL RES & ENVIRO.
 PA (UYAD-) UNIV ADELAIDE.
 PA (ITWA-) INT MAIZE & WHEAT IMPROVEMENT CENT.
 XX
 PI Forster JW, Jones ES;
 XX
 DR WPI; 2001-512563/56.
 XX
 PT New simple sequence repeats having 2 or more tandemly repeated nucleotide
 PT core elements isolated from ryegrass and fescue, useful for selecting of
 PT genes in grass or cereal breeding or profiling grass or cereal species
 PT varieties.
 XX
 PS Example 1; Fig 6; 72pp; English.
 XX
 CC The invention relates to a substantially purified or isolated nucleic
 CC acid (1) from ryegrass or fescue species including a simple sequence
 CC repeat (SSR) having 2 or more tandemly repeated nucleotide core elements
 CC 2-6 nucleotides in length. Also included are a nucleic acid primer
 CC suitable for amplifying an SSR, identifying (M1) an SSR by preparing a
 CC library of ryegrass or fescue genomic DNA enriched for SSRs and
 CC identifying clones in the library containing SSRs, a library of ryegrass
 CC or fescue genomic DNA enriched for SSRs prepared by the M1, selecting for
 CC a gene in grass or cereal breeding by identifying an SSR that is closely
 CC associated with the gene such that the SSR and the gene are
 CC preferentially co-inherited, and selecting for the SSR in the breeding, a

CC method for DNA profiling grass or cereal species varieties by assessing
 CC variation between SSR varieties and testing the purity of grass or cereal
 CC seed batches by assessing variation within seed batch of an SSR. The SSRs
 CC may be used in the selection of genes in grass or cereal breeding, for
 CC profiling grass or cereal species varieties, for testing the purity of
 CC grass or cereal seed batches, and for DNA profiling to establish the
 CC distinct identity, uniformity and/or stability of a cultivar. The present
 CC sequence is a ryegrass or fescue SSR
 XX
 SQ Sequence 16 BP; 0 A; 1 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2315 GTCTGTGTGTGTGTGT 2330
 DB 1 GTCTGTGTGTGTGT 16
 |||

RESULT 976

AAD63065

ID AAD63065 standard; DNA; 16 BP.

XX AAD63065;

AC AAD63065;

DT 12-FEB-2004 (first entry)

XX Human carboxypeptidase A3 tandem tag DNA #1.

DE Human carboxypeptidase A3 tandem tag DNA #1.

XX Tandem tag; concatenated tag; human; carboxypeptidase A3; ds.

KW Homo sapiens.

OS US2003190618-A1.

XX 09-OCT-2003.

XX 06-MAR-2002; 2002US-00092885.

XX 06-MAR-2002; 2002US-00092885.

XX (SAMA/) SAMAL B.

PA (LIYY/) LI Y.

PA (HERM/) HERMIDA L C.

PA (HOPP/) HOPPA N L.

PA (JOHE/) JOHE K K.

XX Samal B, Li Y, Hermida LC, Hoppa NL, Johe KK;

PI WPI; 2003-831617/77.

XX Generating five prime biased tandem tag libraries of cDNAs by isolating a

PT sample of mRNAs, amplifying the released tags, concatenating the

PT amplified tags to form concatenated tags, amplifying and isolating the

PT concatenated tags.

XX Disclosure; Page 5; Opp; English.

XX The present invention discloses a method for generating five prime biased

CC tandem tag libraries of cDNAs. The step involves isolating a sample of

CC mRNAs, amplifying the released tags, concatenating the amplified tags to

CC form concatenated tags, amplifying and isolating the concatenated tags.

CC The present sequence is human carboxypeptidase A3 tandem tag DNA

XX Sequence 16 BP; 0 A; 0 C; 8 G; 8 T; 0 U; 0 Other;

SQ

Query Match 0.4%; Score 16; DB 1; Length 16;

Best Local Similarity 100.0%; Pred. No. 9.7e+02;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2335 GTCTGTGTGTGTGT 2350

|||||

Db 1 GTCTGTGTGTGTGTGT 16

RESULT 977

ADH70347

ID ADH70347 standard; DNA; 16 BP.

XX ADH70347;

AC ADH70347;

XX 25-MAR-2004 (first entry)

XX Human Vbeta gene repeat sequence #137.

DE human; T-cell associated disease; Vbeta; autoimmune disease;

XX degenerative nervous system disease; graft versus host disease;

KW hypersensitivity disease; infectious disease; neoplastic disease;

KW Addison's disease; atrophic gastritis;

KW degenerative nervous system disease; multiple sclerosis;

KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;

KW allergy; type II hypersensitivity; Goodpasture's syndrome;

KW type IV hypersensitivity; leprosy; infectious disease; viral infection;

KW HIV; fungal infection; Candida; parasitic infection; schistosoma;

KW filaria; bacterial infection; Mycobacterium; neoplastic disease;

KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;

KW breast cancer; ds.

XX Homo sapiens.

OS US2002150891-A1.

XX 17-OCT-2002.

XX 05-MAR-1999; 99US-00263959.

XX 19-SEP-1994; 94US-00309335.

XX 19-SEP-1995; 95US-00531241.

XX (HOOD/) HOOD L E.

PA (ROWE/) ROWEN L.

XX Hood LE, Rowen L;

XX WPI; 2004-059052/06.

DR Kit for diagnosing and treating T-cell associated diseases e.g.

XX autoimmune, degenerative nervous system and infectious disease, comprises

PT nucleic acid primers specifically priming and allowing amplification of a

PT Vbeta gene.

XX Disclosure; SEQ ID NO 541; 164pp; English.

XX The invention relates to a kit for diagnosing and treating T-cell

CC associated diseases which comprises a panel of nucleic acid primers

CC specifically priming and allowing amplification of each Vbeta gene,

CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant

CC rejection and diagnosing and treating T-cell associated diseases

CC including autoimmune diseases, degenerative nervous system diseases,

CC graft versus host disease, hypersensitivity diseases, infectious diseases

CC and neoplastic diseases. Autoimmune diseases include Addison's disease,

CC atrophic gastritis. Degenerative nervous system diseases include multiple

CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type

CC I hypersensitivities such as contact with allergens that lead to

CC allergies, Type II hypersensitivities such as those present in

CC Goodpasture's syndrome and Type IV hypersensitivities such as those

CC manifested in leprosy. Infectious diseases include viral infections

CC caused by viruses such as HIV, fungal infections such as those caused by

CC the yeast genus Candida, parasitic infections such as those caused by

CC schistosomes, filaria and bacterial infections such as those caused by

CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases

CC such as leukaemias, lymphomas and cancers such as cancer of the brain,

CC breast. The present sequence represents a Vbeta gene repeat sequence.

XX Sequence 16 BP; 8 A; 1 C; 0 G; 7 T; 0 U; 0 Other;

SQ

CC the yeast genus Candida, parasitic infections such as those caused by
CC schistosomes, filaria and bacterial infections such as those caused by
CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
CC such as leukemias, lymphomas and cancers such as cancer of the brain,
CC breast. The present sequence represents a Vbeta gene repeat sequence.
XX
SQ Sequence 16 BP; 7 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2825 TATATACATATATATA 2840
Db 1 TATATACATATATATA 16
RESULT 978
ADH70350/C
ID ADH70350 standard; DNA; 16 BP.
XX
AC ADH70350;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human Vbeta gene repeat sequence #140.
XX
KW human; T-cell associated disease; Vbeta; autoimmune disease;
KW degenerative nervous system disease; graft versus host disease;
KW hypersensitivity disease; infectious disease; neoplastic disease;
KW Addison's disease; atrophic gastritis;
KW degenerative nervous system disease; multiple sclerosis;
KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KW allergy; type II hypersensitivity; Goodpasture's syndrome;
KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
KW HIV; fungal infection; Candida; parasitic infection; schistosome;
KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
KW breast cancer; ds.
XX
OS Homo sapiens.
XX
PN US2002150891-A1.
XX
PD 17-OCT-2002.
XX
PF 05-MAR-1999; 99US-00263959.
XX
PR 19-SEP-1994; 94US-00309335.
PR 19-SEP-1995; 95US-00531241.
XX
PA (HOOD/) HOOD L B.
PA (ROWE/) ROWEN L.
XX
PI Hood LE, Rowen L;
XX
DR WPI; 2004-059052/06.
XX
PT Kit for diagnosing and treating T-cell associated diseases e.g.
PT autoimmune, degenerative nervous system and infectious disease, comprises
PT nucleic acid primers specifically priming and allowing amplification of a
PT Vbeta gene.
XX
PS Disclosure; SEQ ID NO 544; 164pp; English.
XX
CC The invention relates to a kit for diagnosing and treating T-cell
CC associated diseases which comprises a panel of nucleic acid primers
CC specifically priming and allowing amplification of each Vbeta gene,
CC VbetarNA or cDNA. The kit is useful for diagnosing organ transplant
CC rejection and diagnosing and treating T-cell associated diseases
CC including autoimmune diseases, degenerative nervous system diseases,
CC graft versus host disease, hypersensitivity diseases, infectious diseases
CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
CC atrophic gastritis. Degenerative nervous system diseases include multiple
CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
CC I hypersensitivities such as contact with allergens that lead to
CC allergies. Type II hypersensitivities such as those present in
CC Goodpasture's syndrome and Type IV hypersensitivities such as those
CC manifested in leprosy. Infectious diseases include viral infections
CC caused by viruses such as HIV, fungal infections such as those caused by
XX

CC the yeast genus Candida, parasitic infections such as those caused by
CC schistosomes, filaria and bacterial infections such as those caused by
CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
CC such as leukemias, lymphomas and cancers such as cancer of the brain,
CC breast. The present sequence represents a Vbeta gene repeat sequence.
XX
SQ Sequence 16 BP; 7 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2823 TATATATACATATATA 2838
Db 16 TATATATACATATATA 1
RESULT 979
AD081095/C
ID AD081095 standard; DNA; 16 BP.
XX
AC AD081095;
XX
DT 29-JUL-2004 (first entry)
XX
DE Sheep prion protein microsatellite locus primer #66.
XX
KW gene typing; polymorphic microsatellite loci; PML;
KW disease predisposition; microsatellite marker; prion disease;
KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
KW milk protein; hormone; transcription factor; pT7-blue-vector; sheep;
KW microsatellite; PCR; primer; ss.
XX
OS Ovis aries.
XX
PN DE10236711-A1.
XX
PD 26-FEB-2004.
XX
PF 09-AUG-2002; 2002DE-01036711.
PR 09-AUG-2002; 2002DE-01036711.
XX
PA (UYHO-) UNIV HOHENHEIM.
XX
PI Geldermann H, Preuss S, Han Y;
XX
DR WPI; 2004-215730/21.
XX
PT Typing genes that contain polymorphic microsatellite loci, useful for
PT identifying predisposition to disease, by amplification and determining
PT length of amplicons.
XX
PS Example 3; Page 30; 64pp; German.
XX
CC The invention describes a method of typing (M1) a gene (I) that has one
CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
CC amplification of at least one DNA region of (I) that includes PML, using
CC as template a DNA sample containing at least one segment of (I); and
CC determining the length of the resulting amplicon(s). Also described are:
CC a method of determining (M2) microsatellite markers (MM) for
CC predisposition to a disease, associated with a gene that includes one or
CC more PML; and prediagnosis (M3) of diseases associated with gene that
CC include PML. The method is used to identify microsatellite markers, in a
CC disease-related gene, that are associated with a predisposition to
CC diseases and for prediagnosis of such diseases, especially prion diseases
CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
CC metabolic diseases; also to type genes that encode milk proteins,
CC hormones or transcription factors. The method is simpler, quicker and
CC particularly less expensive than known methods based on sequencing. This
CC sequence represents a primer used to genotype a region of the sheep prion
CC protein (PrP) comprising a polymorphic microsatellite locus.
XX

```

SQ Sequence 16 BP; 8 A; 8 C; 0 G; 0 T; 0 U; 0 Other;
  Query Match      0.4%; Score 16; DB 1; Length 16;
  Best Local Similarity 100.0%; Pred. No. 9.7e+02;
  Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2318 TGTGTGTGTGTGTG 2333
DB 16 TGTGTGTGTGTGTG 1

RESULT 980
AAQ34164
ID AAQ34164 standard; DNA; 17 BP.
XX
XX
AC AAQ34164;
XX
XX 25-MAR-2003 (revised)
DT 02-FEB-1993 (first entry)
XX
XX Sequence of a microsatellite from clone TGLA84.
DE
DE PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
KW genetic mapping; traits; amplification; ss.
KW
XX Bos taurus.
OS
XX WO9213102-A1.
PN
XX
XX 06-AUG-1992.
PD
XX 15-JAN-1992; 92WO-US000340.
PF
XX 15-JAN-1991; 91US-00642342.
PR
XX (GENM-) GENMARK.
PA
XX Georges M, Massey JM;
PI WPI; 1992-284684/34.
XX
XX Polymorphic bovine DNA markers - used in genetic identification, gene
PT mapping, and selective breeding.
PT
XX Table 7; Page 396; 517pp; English.
XX
XX The sequence is that of a bovine microsatellite sequence obtd. by
CC screening a library of bovine MboI DNA fragments of between 250 and 500
CC bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
CC clones cross-hybridised. Assuming independent distribution of
CC microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
CC in the bovine genome is estimated at >100,000. The sequence information
CC for ca. 230 such bovine microsatellites is summarised in the
CC specification and indexed herein (see below). The sequences upstream and
CC downstream of the microsatellite sequence were used to generate the
CC required PCR primers for in vitro amplification of the corresp.
CC microsatellite (using the program OPTIPRIM). The microsatellites may be
CC used to identify individuals, for parentage testing, and in the genetic
CC mapping of economic trait loci, or genes involved the determination of
CC economically important traits esp. in cattle, to allow selective
CC breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
XX Sequence 17 BP; 0 A; 0 C; 8 G; 9 T; 0 U; 0 Other;
SQ
  Query Match      0.4%; Score 16; DB 1; Length 17;
  Best Local Similarity 100.0%; Pred. No. 1e+03;
  Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2318 TGTGTGTGTGTGTG 2333
DB 1 TGTGTGTGTGTGTG 16

RESULT 982
AAQ56865
ID AAQ56865 standard; DNA; 17 BP.
XX
XX
AC AAQ56865;
XX
XX 16-JUL-1999 (first entry)
DT
XX WO9513834 oligonucleoside 10.
DE

```

XX
KW Oligonucleoside; RNaseH-mediated cleavage; target; RNaseH; inhibitor;
KW internucleoside linkage; antisense; diagnosis; treatment; disease;
KW binding affinity; Ka; nuclease resistance; ss.
XX
OS Synthetic.
XX
PN W09513834-A1.
XX
PD 26-MAY-1995.
XX
PF 16-NOV-1994; 94WO-US013387.
XX
PR 16-NOV-1993; 93US-00154013.
PR 16-NOV-1993; 93US-00154014.
PR 26-APR-1994; 94US-00233778.
PR 04-MAY-1994; 94US-00238177.
XX
PA (GENT-) GENTA INC.
XX
PI Arnold LJ, Reynolds MA, Giachetti C;
XX
DR WPI; 1995-254769/33.
XX
PT New oligo-nucleotide(s) causing cleavage of target RNA - with RNaseH
PT activated segment having charged inter-nucleoside links and second
PT segment with chirally selected links.
XX
PS Disclosure; Page 137; 165pp; English.
XX
CC This invention describes novel oligonucleosides that causes RNaseH-
CC mediated cleavage of target RNA comprising (a) an RNaseH-activating
CC region (R1) of at least 3 consecutive 2'-unsubstituted nucleosides
CC connected by charged internucleoside links and (b) a non-RNase activating
CC region (R2) of at least 2 nucleosides, with at least one chirally
CC selected internucleoside link. The oligonucleosides of the invention have
CC base sequences complementary to that of target RNA. The products of the
CC invention are used to inhibit transcription of target RNA in a cell or
CC organism, they are antisense molecules that also activate RNaseH.
CC Particularly the oligonucleosides are used in diagnosis and treatment of
CC disease associated with endogenous or foreign gene expression. Use
CC against human papilloma virus is exemplified. The modified
CC internucleoside links improve target specificity, potency and binding
CC affinity (Ka) compared with racemic analogues. They are also more
CC resistant to nuclease and so have better in-vivo lifetimes. The chirally
CC selected linkages in R2 allow control of binding affinity. AAX56855-
CC X56881 represent oligonucleosides used in the method of the invention
XX
SQ Sequence 17 BP; 1 A; 0 C; 8 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2335 GTGTGTGTGTGTGTGT 2350
DB 1 GTGTGTGTGTGTGTGT 16

RESULT 983
AAT66099/c
ID AAT66099 standard; DNA; 17 BP.
XX
AC AAT66099;
XX
XX 25-MAR-2003 (revised)
DT 18-JUN-1997 (first entry)
XX
DE Repeat sequence found in the angiogenin gene.
XX
KW Polymorphism; repeat sequence; genetic marker; primer; amplification;
KW PCR; polymerase chain reaction; paternity; maternity; human; pedigree;
KW linkage analysis; genetic disease; animal; plant; breeding; locus;

KW hybridisation; chromosome; ds.
XX
OS Homo sapiens.
XX
PN US5582979-A.
XX
PD 10-DEC-1996.
XX
PF 04-APR-1994; 94US-00222177.
XX
PR 21-APR-1989; 89US-00341562.
PR 05-SEP-1991; 91US-00754351.
XX
PA (MARS-) MARSHFIELD CLINIC.
XX
PI Weber JL;
XX
DR WPI; 1997-042299/04.
XX
PT Detection of polymorphic genetic markers of the form (dC-dA)n(dG-dT)n -
PT using novel nucleic acid mols. as primers.
XX
PS Example 9; Col 61-62; 186pp; English.
XX
CC The invention relates to the isolation of polymorphic repeat sequences
CC having the sequence (dC-dA)n.(dG-dT)n which can be used as genetic
CC markers. Primers based on these sequences can be used to detect these
CC repeats, especially for use in e.g paternity or maternity testing, human
CC genetic analysis, such as linkage analysis of genetic disease, commercial
CC animal or plant breeding or pedigree analysis. The sequences AAT66084-
CC T66107 represent repeat sequences of low informativeness found in
CC specific human genes. This repeat sequence is found in the angiogenin
CC gene located at chromosomal position 14q11-q13. The sequence is amplified
CC by primers AAT66100-1. (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ Sequence 17 BP; 9 A; 8 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2318 TGTGTGTGTGTGTGTG 2333
DB 17 TGTGTGTGTGTGTGTG 2

RESULT 984
AAX91062
ID AAX91062 standard; DNA; 17 BP.
XX
AC AAX91062;
XX
DT 15-NOV-1999 (first entry)
XX
DE Methylphosphonate oligomer 2517-1.
XX
KW Phosphate internucleosidyl linkage; chirality; hybridization; racemic;
KW binding affinity; ss.
XX
OS Synthetic.
XX
PN US5955597-A.
XX
PD 21-SEP-1999.
XX
PF 30-JUN-1997; 97US-00885126.
XX
PR 16-NOV-1993; 93US-00154013.
PR 21-NOV-1994; 94US-00343018.
XX
PA (GENT-) GENTA INC.
XX
PI Schwartz DA, Vaghefi MM, Riley TA, Arnold LJ, Reynolds MA;

XX WPI; 1999-539600/45.
 XX Oligomers made using chirally pure nucleoside dimers, trimers, or
 PT tetramers with enhanced binding affinities.
 XX
 XX Example 19; Col 39-40; 30pp; English.
 XX
 XX The invention provides methods for preparing oligomers having phosphonate
 CC internucleosidyl linkages of a preselected chirality which hybridize to a
 CC target RNA sequence. The method of making comprises: (a) synthesizing a
 CC nucleoside dimer, trimer, or tetramer with racemic internucleosidyl
 CC phosphonate linkages; (b) purifying the racemic nucleoside to a chirally
 CC pure nucleoside; and (c) sequentially linking at least 2 of the chirally
 CC pure nucleosides to form a synthetic oligomer that is enriched for
 CC phosphonate internucleosidyl linkages of a preselected chirality and is
 CC complementary to an RNA target sequence. The methods are useful for
 CC providing chirally enriched synthetic oligomers. Rp chirally enriched
 CC synthetic oligomers have enhanced binding affinities for RNA compared to
 CC oligomers with racemic all methylphosphonate internucleosidyl linkages.
 CC Sequences AAX91054-75 represent oligomers chemically synthesised using
 CC the method of the invention
 XX
 SQ Sequence 17 BP; 1 A; 0 C; 8 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2335 GTGTGTGTGTGTGTGT 2350
 Db 1 GTGTGTGTGTGTGTGT 16
 RESULT 985
 AAD17599/c
 ID AAD17599 standard; DNA; 17 BP.
 XX
 AC AAD17599;
 XX
 DT 10-DEC-2001 (first entry)
 XX
 XX 5' variation generator oligonucleotide PCR primer #14.
 XX Genomic DNA analysis; 5' variation generator; 3' fragment generator;
 KW endangered animal identification; PCR primer; ss.
 XX Unidentified.
 OS
 XX EP1130114-A1.
 XX
 PD 05-SEP-2001.
 XX
 XX 03-MAR-2000; 2000EP-00200757.
 PF
 XX 03-MAR-2000; 2000EP-00200757.
 PR
 XX (VHAE-) VAN HARINGEN LAB BV.
 PA
 XX Van Haringen H, Van Haringen WA;
 PI WPI; 2001-572636/65.
 XX
 XX Analyzing genomic DNA in a sample, useful for analyzing genes of
 PT organisms (e.g. a species or individual) or identifying endangered
 PT animals or plants, by using oligonucleotide primers comprising universal
 PT variable fragments.
 XX
 XX Example 1; Page 6; 23pp; English.
 PS
 XX The patent discloses a method and associated kit for analysing genomic
 CC DNA in a sample. The method comprises conducting a nucleic acid
 CC amplification on the genomic DNA in the sample using both first and
 CC second oligonucleotide primers to produce DNA fragments based on repeat
 CC sequences on at least one end of the genomic DNA. The first primer is a
 CC 5' variation generator including a repeat sequence and at least one non-
 CC repeat nucleotide. The second oligonucleotide primer is a 3' fragment
 CC generator starting within such a genetic distance that amplification of
 CC the genomic DNA can be performed and preferably includes inosine. The
 CC method is useful for the genetic analysis of an individual organism,
 CC particularly of a species or individual. It is also useful for the rapid
 CC and straight forward identification of endangered animals or plants. The
 CC present DNA sequence is a 5' variation generator oligonucleotide PCR
 CC primer

CC second oligonucleotide primer to produce DNA fragments based on repeat
 CC sequences on at least one end of the genomic DNA. The first primer is a
 CC 5' variation generator including a repeat sequence and at least one non-
 CC repeat nucleotide. The second oligonucleotide primer is a 3' fragment
 CC generator starting within such a genetic distance that amplification of
 CC the genomic DNA can be performed and preferably includes inosine. The
 CC method is useful for the genetic analysis of an individual organism,
 CC particularly of a species or individual. It is also useful for the rapid
 CC and straight forward identification of endangered animals or plants. The
 CC present DNA sequence is a 5' variation generator oligonucleotide PCR
 CC primer
 XX
 SQ Sequence 17 BP; 8 A; 8 C; 0 G; 1 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2318 TGTGTGTGTGTGTGTG 2333
 Db 17 TGTGTGTGTGTGTGTG 2
 RESULT 986
 AAD17594
 ID AAD17594 standard; DNA; 17 BP.
 XX
 AC AAD17594;
 XX
 DT 10-DEC-2001 (first entry)
 XX
 XX 5' variation generator oligonucleotide PCR primer #9.
 XX Genomic DNA analysis; 5' variation generator; 3' fragment generator;
 KW endangered animal identification; PCR primer; ss.
 XX Unidentified.
 OS
 XX EP1130114-A1.
 XX
 PD 05-SEP-2001.
 XX
 XX 03-MAR-2000; 2000EP-00200757.
 PF
 XX 03-MAR-2000; 2000EP-00200757.
 PR
 XX (VHAE-) VAN HARINGEN LAB BV.
 PA
 XX Van Haringen H, Van Haringen WA;
 PI WPI; 2001-572636/65.
 XX
 XX Analyzing genomic DNA in a sample, useful for analyzing genes of
 PT organisms (e.g. a species or individual) or identifying endangered
 PT animals or plants, by using oligonucleotide primers comprising universal
 PT variable fragments.
 XX
 XX Example 1; Page 6; 23pp; English.
 PS
 XX The patent discloses a method and associated kit for analysing genomic
 CC DNA in a sample. The method comprises conducting a nucleic acid
 CC amplification on the genomic DNA in the sample using both first and
 CC second oligonucleotide primers to produce DNA fragments based on repeat
 CC sequences on at least one end of the genomic DNA. The first primer is a
 CC 5' variation generator including a repeat sequence and at least one non-
 CC repeat nucleotide. The second oligonucleotide primer is a 3' fragment
 CC generator starting within such a genetic distance that amplification of
 CC the genomic DNA can be performed and preferably includes inosine. The
 CC method is useful for the genetic analysis of an individual organism,
 CC particularly of a species or individual. It is also useful for the rapid
 CC and straight forward identification of endangered animals or plants. The
 CC present DNA sequence is a 5' variation generator oligonucleotide PCR
 CC primer

```

XX SQ Sequence 17 BP; 0 A; 0 C; 8 G; 9 T; 0 U; 0 Other;
    Query Match      0.4%; Score 16; DB 1; Length 17;
    Best Local Similarity 100.0%; Pred. No. 1e+03;
    Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2318 TGTGTGTGTGTGTGTG 2333
    |||||
    2 TGTGTGTGTGTGTGTG 17

Db

RESULT 987
AAD17597/C
ID AAD17597 standard; DNA; 17 BP.
XX
AC AAD17597;
XX
XX 10-DEC-2001 (first entry)
XX
XX 5' variation generator oligonucleotide PCR primer #12.
DE
XX Genomic DNA analysis; 5' variation generator; 3' fragment generator;
KW endangered animal identification; PCR primer; ss.
XX
OS Unidentified.
XX
PN EP1130114-A1.
XX
PD 05-SEP-2001.
XX
PF 03-MAR-2000; 2000EP-00200757.
XX
PR 03-MAR-2000; 2000EP-00200757.
XX
PA (VHAE-) VAN HARINGEN LAB BV.
XX
XX Van Haringen H, Van Haringen WA;
XX
XX WPI; 2001-572636/65.
XX
XX Analyzing genomic DNA in a sample, useful for analyzing genes of
PT organisms (e.g. a species or individual) or identifying endangered
PT animals or plants, by using oligonucleotide primers comprising universal
PT variable fragments.
XX
PS Example 1; Page 6; 23pp; English.
XX
XX The patent discloses a method and associated kit for analysing genomic
CC DNA in a sample. The method comprises conducting a nucleic acid
CC amplification on the genomic DNA in the sample using both first and
CC second oligonucleotide primer to produce DNA fragments based on repeat
CC sequences on at least one end of the genomic DNA. The first primer is a
CC 5' variation generator including a repeat sequence and at least one non-
CC repeat nucleotide. The second oligonucleotide primer is a 3' fragment
CC generator starting within such a genetic distance that amplification of
CC the genomic DNA can be performed and preferably includes inosine. The
CC method is useful for the genetic analysis of an individual organism,
CC particularly of a species or individual. It is also useful for the rapid
CC and straight forward identification of endangered animals or plants. The
CC present DNA sequence is a 5' variation generator oligonucleotide PCR
CC primer
XX
SQ Sequence 17 BP; 8 A; 9 C; 0 G; 0 T; 0 U; 0 Other;
    Query Match      0.4%; Score 16; DB 1; Length 17;
    Best Local Similarity 100.0%; Pred. No. 1e+03;
    Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2318 TGTGTGTGTGTGTGTG 2333
    |||||
    17 TGTGTGTGTGTGTGTG 2

Db

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```

RESULT 988
AAD17595
ID AAD17595 standard; DNA; 17 BP.
XX
AC AAD17595;
XX
XX 10-DEC-2001 (first entry)
XX
XX 5' variation generator oligonucleotide PCR primer #10.
DE
XX Genomic DNA analysis; 5' variation generator; 3' fragment generator;
KW endangered animal identification; PCR primer; ss.
XX
OS Unidentified.
XX
PN EP1130114-A1.
XX
PD 05-SEP-2001.
XX
PF 03-MAR-2000; 2000EP-00200757.
XX
PR 03-MAR-2000; 2000EP-00200757.
XX
PA (VHAE-) VAN HARINGEN LAB BV.
XX
XX Van Haringen H, Van Haringen WA;
XX
XX WPI; 2001-572636/65.
XX
XX Analyzing genomic DNA in a sample, useful for analyzing genes of
PT organisms (e.g. a species or individual) or identifying endangered
PT animals or plants, by using oligonucleotide primers comprising universal
PT variable fragments.
XX
PS Example 1; Page 6; 23pp; English.
XX
XX The patent discloses a method and associated kit for analysing genomic
CC DNA in a sample. The method comprises conducting a nucleic acid
CC amplification on the genomic DNA in the sample using both first and
CC second oligonucleotide primer to produce DNA fragments based on repeat
CC sequences on at least one end of the genomic DNA. The first primer is a
CC 5' variation generator including a repeat sequence and at least one non-
CC repeat nucleotide. The second oligonucleotide primer is a 3' fragment
CC generator starting within such a genetic distance that amplification of
CC the genomic DNA can be performed and preferably includes inosine. The
CC method is useful for the genetic analysis of an individual organism,
CC particularly of a species or individual. It is also useful for the rapid
CC and straight forward identification of endangered animals or plants. The
CC present DNA sequence is a 5' variation generator oligonucleotide PCR
CC primer
XX
SQ Sequence 17 BP; 1 A; 0 C; 8 G; 8 T; 0 U; 0 Other;
    Query Match      0.4%; Score 16; DB 1; Length 17;
    Best Local Similarity 100.0%; Pred. No. 1e+03;
    Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2318 TGTGTGTGTGTGTGTG 2333
    |||||
    2 TGTGTGTGTGTGTGTG 17

Db

RESULT 989
ADH70363
ID ADH70363 standard; DNA; 17 BP.
XX
AC ADH70363;
XX
XX 25-MAR-2004 (first entry)
XX
XX Human Vbeta gene repeat sequence #153.
XX

```

KW human; T-cell associated disease; Vbeta; autoimmune disease;
 KW degenerative nervous system disease; graft versus host disease;
 KW hypersensitivity disease; infectious disease; neoplastic disease;
 KW Addison's disease; atrophic gastritis;
 KW degenerative nervous system disease; multiple sclerosis;
 KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
 KW allergy; type II hypersensitivity; Goodpasture's syndrome;
 KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
 KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
 KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
 KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
 KW breast cancer; ds.
 XX Homo sapiens.
 OS US2002150891-A1.
 PN 17-OCT-2002.
 PD 05-MAR-1999; 99US-00263959.
 XX 19-SEP-1994; 94US-00309335.
 PR 19-SEP-1995; 95US-00531241.
 XX (HOOD/) HOOD L E.
 PA (ROWE/) ROWEN L.
 XX Hood LE, Rowen L;
 PI WPI; 2004-059052/06.
 DR Kit for diagnosing and treating T-cell associated diseases e.g.
 PT autoimmune, degenerative nervous system and infectious disease, comprises
 PT nucleic acid primers specifically priming and allowing amplification of a
 PT Vbeta gene.
 XX Disclosure; SEQ ID NO 557; 164pp; English.
 XX The invention relates to a kit for diagnosing and treating T-cell
 CC associated diseases which comprises a panel of nucleic acid primers
 CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases
 CC including autoimmune diseases, degenerative nervous system diseases,
 CC graft versus host disease, hypersensitivity diseases, infectious diseases,
 CC atrophic gastritis. Degenerative nervous system diseases include multiple
 CC sclerosis and Alzheimer's disease. Autoimmune diseases include Addison's disease,
 CC allergy, Type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by
 CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a Vbeta gene repeat sequence.
 XX Sequence 17 BP; 0 A; 0 C; 8 G; 9 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2318 TGTGTGTGTGTGTGTG 2333
 DB 1 TGTGTGTGTGTGTGTG 16
 RESULT 990
 ADH70776
 ID ADH70776 standard; DNA; 17 BP.

XX ADH70776;
 AC 25-MAR-2004 (first entry)
 XX Human Vbeta gene repeat sequence #566.
 DE human; T-cell associated disease; Vbeta; autoimmune disease;
 KW degenerative nervous system disease; graft versus host disease;
 KW hypersensitivity disease; infectious disease; neoplastic disease;
 KW Addison's disease; atrophic gastritis;
 KW degenerative nervous system disease; multiple sclerosis;
 KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
 KW allergy; type II hypersensitivity; Goodpasture's syndrome;
 KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
 KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
 KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
 KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
 KW breast cancer; ds.
 XX Homo sapiens.
 OS US2002150891-A1.
 PN 17-OCT-2002.
 PD 05-MAR-1999; 99US-00263959.
 XX 19-SEP-1994; 94US-00309335.
 PR 19-SEP-1995; 95US-00531241.
 XX (HOOD/) HOOD L E.
 PA (ROWE/) ROWEN L.
 XX Hood LE, Rowen L;
 PI WPI; 2004-059052/06.
 DR Kit for diagnosing and treating T-cell associated diseases e.g.
 PT autoimmune, degenerative nervous system and infectious disease, comprises
 PT nucleic acid primers specifically priming and allowing amplification of a
 PT Vbeta gene.
 XX Disclosure; SEQ ID NO 970; 164pp; English.
 XX The invention relates to a kit for diagnosing and treating T-cell
 CC associated diseases which comprises a panel of nucleic acid primers
 CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases
 CC including autoimmune diseases, degenerative nervous system diseases,
 CC graft versus host disease, hypersensitivity diseases, infectious diseases,
 CC atrophic gastritis. Degenerative nervous system diseases include Addison's disease,
 CC allergy, Type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by
 CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a Vbeta gene repeat sequence.
 XX Sequence 17 BP; 0 A; 0 C; 8 G; 9 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2318 TGTGTGTGTGTGTGTG 2333

Db 1 TGTGTGTGTGTGTG 16
|||||
RESULT 991
ADH70511
ID ADH70511 standard; DNA; 17 BP.
XX ADH70511;
DT 25-MAR-2004 (first entry)
XX Human Vbeta gene repeat sequence #301.
DE human; T-cell associated disease; Vbeta; autoimmune disease;
XX degenerative nervous system disease; graft versus host disease;
KW hypersensitivity disease; infectious disease; neoplastic disease;
KW Addison's disease; atrophic gastritis;
KW degenerative nervous system disease; multiple sclerosis;
KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KW allergy; type II hypersensitivity; Goodpasture's syndrome;
KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
breast cancer; ds.
XX Homo sapiens.
OS US2002150891-A1.
XX 17-OCT-2002.
XX 05-MAR-1999; 99US-00263959.
XX 19-SEP-1994; 94US-00309335.
PR 19-SEP-1995; 95US-00531241.
XX (HOOD/) HOOD L E.
PA (ROWE/) ROWEN L.
XX Hood LE, Rowen L;
PI WPI; 2004-059052/06.
XX Kit for diagnosing and treating T-cell associated diseases e.g.
PT autoimmune, degenerative nervous system and infectious disease, comprises
PT nucleic acid primers specifically priming and allowing amplification of a
PT Vbeta gene.
XX Disclosure; SEQ ID NO 705; 164pp; English.
XX The invention relates to a kit for diagnosing and treating T-cell
CC associated diseases which comprises a panel of nucleic acid primers
CC specifically priming and allowing amplification of each Vbeta gene,
CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
CC rejection and diagnosing and treating T-cell associated diseases
CC including autoimmune diseases, degenerative nervous system diseases,
CC graft versus host disease, hypersensitivity diseases, infectious diseases
CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
CC atrophic gastritis. Degenerative nervous system diseases include multiple
CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
CC I hypersensitivities such as contact with allergens that lead to
CC allergies, Type II hypersensitivities such as those present in
CC Goodpasture's syndrome and Type IV hypersensitivities such as those
CC manifested in leprosy. Infectious diseases include viral infections
CC caused by viruses such as HIV, fungal infections such as those caused by
CC the yeast genus Candida, parasitic infections such as those caused by
CC schistosomes, filaria and bacterial infections such as those caused by
CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
CC breast. The present sequence represents a Vbeta gene repeat sequence.
XX

SQ Sequence 17 BP; 0 A; 0 C; 8 G; 9 T; 0 U; 0 Other;
Query Match 0.4%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2318 TGTGTGTGTGTGTG 2333
Db 1 TGTGTGTGTGTGTG 16
|||||
RESULT 992
AAV26662
ID AAV26662 standard; DNA; 18 BP.
XX AAV26662;
AC AAV26662;
XX 15-SEP-1998 (first entry)
DT Human PS112 gene primer PS112.F1.
DE Prostate; disease; PS112 gene; detection; diagnosis; cancer; treatment;
KW antibody; primer; ss.
KW Synthetic.
OS Homo sapiens.
OS WO9815657-A1.
XX 16-APR-1998.
PD 08-OCT-1997; 97WO-US018290.
PF 08-OCT-1996; 96US-00727688.
PR (ABBO) ABBOTT LAB.
XX Cohen M, Friedman PN, Gordon J, Hodges SC, Klass MR;
PI Kratochvil JD, Roberts-Rapp L, Russell JC, Stroupe SD;
XX WPI; 1998-240838/21.
XX Detecting a target PS112 polynucleotide - used for diagnosing prostate
PT cancer.
PT Example 2; Page 87; 104pp; English.
XX AAV26662-V26667 are primers used in the construction of plasmid pICNY
CC which is used in a novel method of detecting the presence of a target
CC PS112 polynucleotide in a test sample. The method can also be used to
CC detect mRNA of PS112 in a test sample. The method can be used for
CC diagnosis of prostate cancer, as the presence of PS112 is an indicator of
CC prostate cancer. Antibodies against the polypeptides may be used as
CC markers, or to treat prostate cancer
XX Sequence 18 BP; 1 A; 4 C; 8 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.4%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 832 TGGCTGGTGGTGTGC 847
Db 3 TGGCTGGTGGTGTGC 18
|||||
RESULT 993
AAV77494/c
ID AAV77494 standard; DNA; 18 BP.
XX AAV77494;
AC AAV77494;
XX 05-AUG-1999 (first entry)
DT

```
XX US5912147 primer 38.
XX
XX
XX KW Primer; quantitation; genetic instability; tumour cell; detection;
XX neoplastic transformation; carcinogenesis; DNA/RNA hybrid; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT misc_RNA .17..18
XX FT /*tag= a
XX FT /note= "uracil"
XX
XX PN US5912147-A.
XX
XX PD 15-JUN-1999.
XX
XX PF 22-OCT-1996; 96US-00734973.
XX
XX PR 22-OCT-1996; 96US-00734973.
XX
XX PA (HEAL-) HEALTH RES INC.
XX
XX PI Anderson G, Stoler D, Basik M;
XX
XX WPI; 1999-357197/30.
XX
XX PT Quantitating genetic instability.
XX
XX PS Claim 4; Col 31-32; 27pp; English.
XX
XX CC This invention describes a novel method for quantitating genetic
XX instability independent of microsatellite alterations by treating a
XX comparison pair comprising genomic DNA from tumour cells and genomic DNA
XX from normal cells. The method involves the cells from the same individual
XX with oligonucleotide primers selected from (i) a nucleotide sequence
XX (CG)XRG, where R is a purine selected from adenine and guanine and x = 3-
XX 7, (ii) a nucleotide sequence (CG)XY, where R is as in (i) and Y is a
XX pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
XX a nucleotide sequence (CG)XRR, where R is as in (i) and x = 3-7, (iv) a
XX nucleotide sequence (CG)XY, where Y is a pyrimidine selected from
XX cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
XX (CA)XRG, where R is a purine selected from adenine and guanine and x = 6-
XX 16, (vi) a nucleotide sequence (CA)XY, where R is a purine selected from
XX adenine and guanine and Y is a pyrimidine selected from cytosine,
XX thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)XRR,
XX where R is a purine selected from adenine and guanine and x = 6-16,
XX (viii) a nucleotide sequence (CA)XY, where Y is a pyrimidine selected
XX from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
XX of the primers. The method is useful for detecting genomic instability
XX which are commonly associated with the various stages of neoplastic
XX transformation and carcinogenesis. The method is rapid and simple
XX
XX SQ Sequence 18 BP; 8 A; 8 C; 0 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 0.4%; Score 16; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2318 TGTGTGTGTGTGTGTG 2333
XX
XX Db 16 TGTGTGTGTGTGTGTG 1
XX
XX RESULT 994
XX AAX77493/c
XX ID AAX77493 standard; DNA; 18 BP.
XX
XX AC AAX77493;
XX
XX DT 05-AUG-1999 (first entry)
XX
XX DE US5912147 primer 37.
XX
XX KW Primer; quantitation; genetic instability; tumour cell; detection;
```

```
XX
XX KW Primer; quantitation; genetic instability; tumour cell; detection;
XX neoplastic transformation; carcinogenesis; DNA/RNA hybrid; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT misc_RNA 17
XX FT /*tag= a
XX FT /note= "uracil"
XX
XX PN US5912147-A.
XX
XX PD 15-JUN-1999.
XX
XX PF 22-OCT-1996; 96US-00734973.
XX
XX PR 22-OCT-1996; 96US-00734973.
XX
XX PA (HEAL-) HEALTH RES INC.
XX
XX PI Anderson G, Stoler D, Basik M;
XX
XX WPI; 1999-357197/30.
XX
XX PT Quantitating genetic instability.
XX
XX PS Claim 4; Col 31-32; 27pp; English.
XX
XX CC This invention describes a novel method for quantitating genetic
XX instability independent of microsatellite alterations by treating a
XX comparison pair comprising genomic DNA from tumour cells and genomic DNA
XX from normal cells. The method involves the cells from the same individual
XX with oligonucleotide primers selected from (i) a nucleotide sequence
XX (CG)XRG, where R is a purine selected from adenine and guanine and x = 3-
XX 7, (ii) a nucleotide sequence (CG)XY, where R is as in (i) and Y is a
XX pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
XX a nucleotide sequence (CG)XRR, where R is as in (i) and x = 3-7, (iv) a
XX nucleotide sequence (CG)XY, where Y is a pyrimidine selected from
XX cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
XX (CA)XRG, where R is a purine selected from adenine and guanine and x = 6-
XX 16, (vi) a nucleotide sequence (CA)XY, where R is a purine selected from
XX adenine and guanine and Y is a pyrimidine selected from cytosine,
XX thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)XRR,
XX where R is a purine selected from adenine and guanine and x = 6-16,
XX (viii) a nucleotide sequence (CA)XY, where Y is a pyrimidine selected
XX from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
XX of the primers. The method is useful for detecting genomic instability
XX which are commonly associated with the various stages of neoplastic
XX transformation and carcinogenesis. The method is rapid and simple
XX
XX SQ Sequence 18 BP; 8 A; 8 C; 0 G; 1 T; 1 U; 0 Other;
XX
XX Query Match 0.4%; Score 16; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2318 TGTGTGTGTGTGTGTG 2333
XX
XX Db 16 TGTGTGTGTGTGTGTG 1
XX
XX RESULT 995
XX AAX77459/c
XX ID AAX77459 standard; DNA; 18 BP.
XX
XX AC AAX77459;
XX
XX DT 05-AUG-1999 (first entry)
XX
XX DE US5912147 primer 3.
XX
XX KW Primer; quantitation; genetic instability; tumour cell; detection;
```

KW neoplastic transformation; carcinogenesis; ss.
 XX Synthetic.
 OS
 PN US5912147-A.
 XX
 PD 15-JUN-1999.
 XX
 PF 22-OCT-1996; 96US-00734973.
 XX
 PR 22-OCT-1996; 96US-00734973.
 XX
 PP (HEAL-) HEALTH RES INC.
 XX
 PR Anderson G, Stoler D, Basik M;
 XX WPI; 1999-357197/30.
 DR
 XX Quantitating genetic instability.
 PT
 PS Claim 4; Col 17-18; 27pp; English.
 XX
 CC This invention describes a novel method for quantitating genetic
 CC instability independent of microsatellite alterations by treating a
 CC comparison pair comprising genomic DNA from tumour cells and genomic DNA
 CC with oligonucleotide primers selected from the same individual
 CC (CG)XRG, where R is a purine selected from adenine and guanine and x = 3-
 CC 7, (ii) a nucleotide sequence (CG)XRY, where R is as in (i) and Y is a
 CC pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
 CC a nucleotide sequence (CG)XRR, where R is as in (i) and x = 3-7, (iv) a
 CC nucleotide sequence (CG)XYY, where Y is a pyrimidine selected from
 CC cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
 CC (CA)XRG, where R is a purine selected from adenine and guanine and x = 6-
 CC 16, (vi) a nucleotide sequence (CA)XRY, where R is a purine selected from
 CC adenine and guanine and Y is a pyrimidine selected from cytosine,
 CC thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)XRR,
 CC where R is a purine selected from adenine and guanine and x = 6-16,
 CC (viii) a nucleotide sequence (CA)XYY, where Y is a pyrimidine selected
 CC from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
 CC of the primers. The method is useful for detecting genomic instability
 CC which are commonly associated with the various stages of neoplastic
 CC transformation and carcinogenesis. The method is rapid and simple
 CC
 XX Sequence 18 BP; 9 A; 9 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 16; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2318 TGTGTGTGTGTGTGTG 2333
 Db 16 TGTGTGTGTGTGTGTG 1
 RESULT 996
 AAX77491/C
 ID AAX77491 standard; DNA; 18 BP.
 XX
 AC AAX77491;
 XX
 DT 05-AUG-1999 (first entry)
 XX
 DE US5912147 primer 35.
 XX
 DE US5912147 primer 35.
 XX
 KW Primer; quantitation; genetic instability; tumour cell; detection;
 KW neoplastic transformation; carcinogenesis; DNA/RNA hybrid; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_RNA 18
 FT /*tag= a

/note= "uracil"
 US5912147-A.
 15-JUN-1999.
 22-OCT-1996; 96US-00734973.
 22-OCT-1996; 96US-00734973.
 (HEAL-) HEALTH RES INC.
 Anderson G, Stoler D, Basik M;
 WPI; 1999-357197/30.
 Quantitating genetic instability.
 Claim 4; Col 31-32; 27pp; English.
 This invention describes a novel method for quantitating genetic
 instability independent of microsatellite alterations by treating a
 comparison pair comprising genomic DNA from tumour cells and genomic DNA
 with oligonucleotide primers selected from (i) a nucleotide sequence
 (CG)XRG, where R is a purine selected from adenine and guanine and x = 3-
 7, (ii) a nucleotide sequence (CG)XRY, where R is as in (i) and Y is a
 pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
 a nucleotide sequence (CG)XRR, where R is as in (i) and x = 3-7, (iv) a
 nucleotide sequence (CG)XYY, where Y is a pyrimidine selected from
 cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
 (CA)XRG, where R is a purine selected from adenine and guanine and x = 6-
 16, (vi) a nucleotide sequence (CA)XRY, where R is a purine selected from
 adenine and guanine and Y is a pyrimidine selected from cytosine,
 thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)XRR,
 where R is a purine selected from adenine and guanine and x = 6-16,
 (viii) a nucleotide sequence (CA)XYY, where Y is a pyrimidine selected
 from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
 of the primers. The method is useful for detecting genomic instability
 which are commonly associated with the various stages of neoplastic
 transformation and carcinogenesis. The method is rapid and simple
 Sequence 18 BP; 8 A; 8 C; 0 G; 1 T; 1 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2318 TGTGTGTGTGTGTGTG 2333
 Db 16 TGTGTGTGTGTGTGTG 1
 RESULT 997
 AAX77492/C
 ID AAX77492 standard; DNA; 18 BP.
 XX
 AC AAX77492;
 XX
 DT 05-AUG-1999 (first entry)
 XX
 DE US5912147 primer 36.
 XX
 DE US5912147 primer 36.
 KW Primer; quantitation; genetic instability; tumour cell; detection;
 KW neoplastic transformation; carcinogenesis; DNA/RNA hybrid; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_RNA 17
 FT /*tag= a
 FT /note= "uracil"

CC (CG)xRG, where R is a purine selected from adenine and guanine and x = 3-
 CC 7, (ii) a nucleotide sequence (CG)xRY, where R is as in (i) and Y is a
 CC pyrimidine selected from cytosine, thymine, and uracil and x = 3-7, (iii)
 CC a nucleotide sequence (CG)xRR, where R is as in (i) and x = 3-7, (iv) a
 CC nucleotide sequence (CG)xY, where Y is a pyrimidine selected from
 CC cytosine, thymine, and uracil and x = 3-7, (v) a nucleotide sequence
 CC (CA)xRG, where R is a purine selected from adenine and guanine and x = 6-
 CC 16, (vi) a nucleotide sequence (CA)xRY, where R is a purine selected from
 CC adenine and guanine and Y is a pyrimidine selected from cytosine,
 CC thymine, and uracil, and x = 6-16, (vii) a nucleotide sequence (CA)xRR,
 CC where R is a purine selected from adenine and guanine and x = 6-16,
 CC (viii) a nucleotide sequence (CA)xY, where Y is a pyrimidine selected
 CC from cytosine, thymine, and uracil and x = 6-16, and (ix) a combination
 CC of the primers. The method is useful for detecting genomic instability
 CC which are commonly associated with the various stages of neoplastic
 CC transformation and carcinogenesis. The method is rapid and simple
 XX
 SQ Sequence 18 BP; 9 A; 8 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 0.4%; Score 16; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2318 TGTGTGTGTGTGTG 2333

DB 16 TGTGTGTGTGTGTG 1

RESULT 1002

ADQ96627

ID ADQ96627 standard; DNA; 18 BP.

XX AC ADQ96627;

XX DT 23-SEP-2004 (first entry)

XX DE Human PS112 sequencing primer seqid 15.

XX KW cytostatic; gene therapy; PS112; recombinant expression system;

XX KW PS112 epitope; prostate disease; tumours; metastasis; predisposition;

XX KW prostate cancer; PCR; primer; ss.

XX OS Homo sapiens.

XX PN US2004121397-A1.

XX PD 24-JUN-2004.

XX PF 22-JAN-2004; 2004US-00763992.

XX PR 08-OCT-1996; 96US-00727688.

XX PR 08-OCT-1997; 97US-00946869.

XX PR 15-OCT-1999; 99US-00418887.

XX PA (COHE/) COHEN M.

XX PA (FRIE/) FRIEDMAN P N.

XX PA (GORD/) GORDON J.

XX PA (HODG/) HODGES S C.

XX PA (KLAS/) KLASS M R.

XX PA (KRAT/) KRATOCHVIL J D.

XX PA (ROBE/) ROBERTS-RAPP L.

XX PA (RUSS/) RUSSELL J C.

XX PA (STRO/) STROUPE S D.

XX PA (YUHH/) YU H.

XX PI Cohen M, Friedman PN, Gordon J, Hodges SC, Klass MR;

XX PI Kratochvil JD, Roberts-Rapp L, Russell JC, Stroupe SD, Yu H;

XX XX WPI; 2004-479676/45.

XX XX Detecting a target PS112 polynucleotide, useful in diagnosing, staging,

XX PT monitoring, prognosticating, preventing and treating prostate cancer,

XX PT comprises contacting the test sample with PS112-specific polynucleotide.

XX Example 2; SEQ ID NO 15; 53pp; English.

XX The invention describes a method of detecting the presence of a target
 CC PS112 polynucleotide in a test sample. The method comprises: contacting
 CC the test sample with at least one PS112-specific polynucleotide or its
 CC complement; and detecting the presence of the target PS112 polynucleotide
 CC in the test sample, where the PS112-specific polynucleotide has at least
 CC 50% identity to a polynucleotide comprising a sequence of 367, 214, 205,
 CC 256, 246, 277, 251, 223, 2393, or 1297 bp (SEQ ID NOS: 1-10) or their
 CC fragments or complements. Also described are: detecting mRNA of PS112 in
 CC a test sample; a test kit, useful for detecting PS112 polynucleotide in
 CC a test sample; a purified polynucleotide or fragment derived from a PS112
 CC gene; a recombinant expression system comprising a nucleic acid sequence
 CC that includes an open reading frame derived from PS112 operably linked to
 CC a control sequence compatible with a desired host, where the nucleic acid
 CC sequence has at least 50% identity to a sequence of SEQ ID NOS: 1-10, or
 CC their fragments or complements; a cell transfected with the recombinant
 CC expression system or with a nucleic acid sequence encoding at least one
 CC PS112 epitope, where the nucleic acid sequence comprises SEQ ID NOS: 1-
 CC 10, or their fragments or complements; a composition of matter comprising
 CC a PS112 polynucleotide or its fragment, where the polynucleotide has at
 CC least 50% identity to a sequence of SEQ ID NOS: 2-10, or their
 CC complements, or has at least 50% identity with fragments of a
 CC polynucleotide of SEQ ID NOS: 4-8; and a gene or its fragment comprising
 CC DNA having at least 50% identity with SEQ ID NOS: 9 or 10. The method is
 CC useful for detecting the presence of a target PS112 polynucleotide in a
 CC test sample. The methods, test kit, polynucleotides and polypeptides, and
 CC antibodies are useful in detecting, diagnosing, staging, monitoring, or
 CC prognosticating, preventing and treating prostate diseases, tumours or
 CC metastases or in determining the predisposition of an individual to
 CC diseases and conditions of the prostate, e.g. prostate cancer. This
 CC sequence represents a primer used to sequence PS112 polynucleotides.

XX SQ Sequence 18 BP; 1 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 832 TGGCTGGTGTGTGTC 847

DB 3 TGGCTGGTGTGTGTC 18

RESULT 1003

AAQ52215

ID AAQ52215 standard; RNA; 19 BP.

XX AC AAQ52215;

XX DT 25-MAR-2003 (revised)

XX DT 26-MAY-1994 (first entry)

XX DE Neuroblastoma specific mRNA ribozyme cleavable nucleotide (1441).

XX KW Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;

XX KW resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;

XX KW actinomycin D; vinblastine; small intestine; kidney; adrenal gland;

XX KW adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;

XX KW human; chronic myelogenous leukemia; CML; follicular lymphoma;

XX KW B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;

XX KW neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif;

XX KW hairpin; hepatitis delta virus; group I intron; RNaseP; leukaemia; ss.

XX OS Homo sapiens.

XX PN WO9323057-A1.

XX PD 25-NOV-1993.

XX PF 13-MAY-1993; 93WO-US004573.

PT myelinogenesis is inhibited by defect of myelinogenesis signal molecules
PT in oligodendroglia, for screening for therapeutic agent for multiple
PT sclerosis.

XX Example; SEQ ID NO 3; 56pp; Japanese.

XX The invention comprises a non-human animal model for demyelinating
CC disease - in which myelinogenesis is inhibited by a defect of
CC myelinogenesis signal molecules in oligodendroglia. The non-human animal
CC model of the invention is useful for screening for a myelin growth
CC regulator, or for screening for a therapeutic agent which is useful for
CC treating a demyelinating disease such as multiple sclerosis. The present
CC DNA sequence represents a PCR primer that was used in an example of the
CC invention.

XX Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2303 CACAGAGCTTTGGTCT 2318
DB 4 CACAGAGCTTTGGTCT 19

RESULT 1006
AAV26667/c
ID AAV26667 standard; DNA; 20 BP.

XX AAV26667;

XX 15-SEP-1998 (first entry)

DE Human PS112 gene primer PS112.R3.

KW Prostate; disease; PS112 gene; detection; diagnosis; cancer; treatment;
KW antibody; primer; ss.

OS Synthetic.

OS Homo sapiens.

XX WO9815657-A1.

XX 16-APR-1998.

XX 08-OCT-1997; 97WO-US018290.

XX 08-OCT-1996; 96US-00727688.

XX (ABBO) ABBOTT LAB.

XX Cohen M, Friedman PN, Gordon J, Hodges SC, Klass MR;

PI Kratochvil JD, Roberts-Rapp L, Russell JC, Stroupe SD;

XX WPI; 1998-240838/21.

XX Detecting a target PS112 polynucleotide - used for diagnosing prostate
PT cancer.

PS Example 2; Page 88; 104pp; English.

XX AAV26662-V26667 are primers used in the construction of plasmid pICNY
CC which is used in a novel method of detecting the presence of a target
CC PS112 polynucleotide in a test sample. The method can also be used to
CC detect mRNA of PS112 in a test sample. The method can be used for
CC diagnosis of prostate cancer, as the presence of PS112 is an indicator of
CC prostate cancer. Antibodies against the polypeptides may be used as
CC markers, or to treat prostate cancer

XX Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 16; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 832 TGGCTGGTGGTCTGC 847
DB 16 TGGCTGGTGGTCTGC 1

RESULT 1007
AAS21755
ID AAS21755 standard; DNA; 20 BP.

XX AAS21755;

XX 21-NOV-2001 (first entry)

DE Mouse Survivin antisense oligonucleotide #57.

KW Survivin; human; mouse; cytostatic; antisense oligonucleotide;
KW hyperproliferative condition; cancer; apoptosis; cytokinesis; ss.

OS Mus musculus.

OS Synthetic.

XX WO200157059-A1.

XX 09-AUG-2001.

XX 30-JAN-2001; 2001WO-US002939.

XX 02-FEB-2000; 2000US-00496694.

XX (ISIS-) ISIS PHARM INC.

XX Bennett CF, Ackermann EJ, Swayze EE, Cowse LM;

XX WPI; 2001-488863/53.

XX Novel antisense compounds for modulating the expression of Survivin and
PT treatment of cancer.

XX Example 18; Page 62; 120pp; English.

XX The invention relates to antisense oligonucleotides targeted to a nucleic
CC acid molecule encoding human Survivin, where the antisense
CC oligonucleotide inhibits the expression of human Survivin. These
CC antisense oligonucleotides are used in the treatment of an animal
CC suffering from a disease or condition associated with Survivin, e.g. a
CC hyperproliferative condition such as cancer, and comprises administering
CC a therapeutically or prophylactically effective amount of the antisense
CC oligonucleotide so that expression of Survivin is inhibited. The
CC oligonucleotides can also be used to treat a human suffering from a
CC disease or condition characterised by a reduction in apoptosis comprising
CC administering the antisense oligonucleotide to a human. In addition, the
CC antisense oligonucleotide and a cytotoxic chemotherapeutic agent e.g.
CC taxol or cisplatin, can be used to modulate apoptosis, cytokinesis or the
CC cell cycle, or inhibit the proliferation in a cancer cell by contacting
CC the cell with the antisense oligonucleotide. AAS21521-AAS21768 represent
CC Survivin nucleic acids, and antisense oligonucleotides targeted to
CC Survivin, used in the method of the invention

XX Sequence 20 BP; 11 A; 2 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 16; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2830 ACATATATATATATA 2845
DB 1 ACATATATATATATA 16

RESULT 1008

PI Nakagawara A;
 XX WPI; 2003-140476/13.
 XX
 XX Nucleic acids having higher expression in human neuroblastoma with poor
 PT prognosis for diagnostic prediction of neuroblastoma prognosis.
 PT
 XX Example 5; Page 26; 11pp; Japanese.
 PS
 XX The invention comprises nucleic acids that show increased expression in
 CC human neuroblastomas with poor prognosis over those with a good
 CC prognosis. The nucleic acids of the invention are useful as a tool for
 CC distinguishing neuroblastomas with a favourable prognosis (spontaneous
 CC regression) from neuroblastomas with a poor prognosis (high malignancy).
 CC The DNA sequences ABR32224 - ABR32571 represent oligonucleotides used in
 CC an example of the invention
 XX
 XX Sequence 20 BP; 4 A; 8 C; 2 G; 5 T; 0 U; 0 Other;
 SQ

Query Match 0.4%; Score 16; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX

QY 2632 CCACATGTCACGACC 2647
 DB |||||
 5 CCACATGTCACGACC 20

RESULT 1011
 ADD69468
 ID ADD69468 standard; DNA; 20 BP.
 XX
 XX ADD69468;
 AC
 XX 15-JAN-2004 (first entry)
 DT
 XX
 DE 3' anchored (ISSR)-PCR primer - SEQ ID 26.
 XX
 XX inter-simple sequence repeat; ISSR; SSR; PCR; primer; genotyping; plant;
 KW animal; Basmati rice; ss.
 KW
 XX Synthetic.
 OS
 XX WO2003085133-A2.
 PN
 XX 16-OCT-2003.
 PD
 XX 09-JAN-2003; 2003WO-IB000041.
 PF
 XX 08-APR-2002; 2002IN-CH000260.
 PR
 XX (DNAP-) CENT DNA FINGERPRINTING & DIAGNOSTICS.
 PA
 XX Nagaraju JG;
 PI
 XX WPI; 2003-804317/75.
 DR
 XX New set of inter-simple sequence repeats (ISSR)-PCR primers for
 PT genotyping eukaryotes, useful for genotyping diverse genomes of plant and
 PT animal systems.
 PT
 XX Claim 1; SEQ ID NO 26; 60pp; English.
 PS
 XX The invention relates to a novel set of inter-simple sequence repeats
 CC (ISSR)-PCR primers for genotyping eukaryotes. The primers of the
 CC invention may be useful for genotyping diverse genomes of plant and
 CC animal systems, in particular for distinguishing Basmati rice varieties
 CC from non-Basmati rice varieties and traditional Basmati rice varieties
 CC from evolved Basmati rice varieties. The current sequence is that of the
 CC 3' anchored (ISSR)-PCR primer of the invention.
 CC
 XX Sequence 20 BP; 1 A; 2 C; 8 G; 9 T; 0 U; 0 Other;
 SQ

Query Match 0.4%; Score 16; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX

QY 2335 GTGTGTGTGTGTGTGT 2350
 DB |||||
 1 GTGTGTGTGTGTGTGT 16

RESULT 1012
 ABZ92156/c
 ID ABZ92156 standard; DNA; 20 BP.
 XX
 XX ABZ92156;
 AC
 XX 17-OCT-2003 (first entry)
 DT
 XX Human oligonucleotide sequence.
 DE
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 KW
 XX Homo sapiens.
 OS
 XX WO200285308-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013135.
 PF
 XX 24-APR-2001; 2001US-0286137P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandraseagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI
 XX WPI; 2003-229219/22.
 DR
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 PT
 XX Disclosure; SEQ ID NO 7398; 872pp; English.
 PS
 XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 20 BP; 8 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
 SQ

| | | | |
|----|---|---|--|
| | Query Match | 0.4%; Score 16; DB 1; Length 20; | |
| | Best Local Similarity | 100.0%; Pred. No. 1.2e+03; | |
| | Matches | 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0; | |
| QY | 2980 ACCAGGCGTTTTCGTG 2995 | | |
| DB | 17 ACCAGGCGTTTTCGTG 2 | | |
| | RESULT 1013 | | |
| ID | ABD28386/c | DNA; 20 BP. | |
| XX | ABD28386 standard; DNA; 20 BP. | | |
| AC | ABD28386; | | |
| DT | 29-JUL-2004 (first entry) | | |
| DE | R78585-derived oligonucleotide SEQ ID 7398. | | |
| XX | Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; | | |
| KW | respiratory tract inflammation; adenosine sensitivity; lung; cancer; | | |
| KW | surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic; | | |
| KW | analgesic; hypertensive; immunosuppressive; cytostatic; cystic fibrosis; | | |
| KW | beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; | | |
| KW | respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; | | |
| KW | emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; | | |
| KW | pulmonary transplantation rejection; ss; primer. | | |
| OS | Homo sapiens. | | |
| XX | WO200285309-A2. | | |
| PN | 31-OCT-2002. | | |
| PD | 23-APR-2002; 2002WO-US013143. | | |
| Pf | 24-APR-2001; 2001US-0286036P. | | |
| PR | (EPIG-) EPIGENESIS PHARM INC. | | |
| PA | Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D; | | |
| PI | Miller S, Tang L, Shahabuddin S; | | |
| XX | WPI; 2003-093058/08. | | |
| DR | Pharmaceutical composition for treating asthma, has antisense | | |
| XX | oligonucleotide containing less percentage of adenosine, targeted to | | |
| PT | nucleic acids associated with lung airway or lung dysfunction, and | | |
| FT | bronchodilating agent. | | |
| XX | Claim 15; SEQ ID NO 7398; 763pp; English. | | |
| XX | This invention describes a novel composition (a) a first active agent, | | |
| CC | comprising oligonucleotides effective for alleviating | | |
| CC | bronchoconstriction, respiratory tract inflammation, allergies and | | |
| CC | reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, | | |
| CC | surfactant depletion or hyposecretion, when administered to a mammal. The | | |
| CC | oligonucleotides are derived from a gene encoding or regulating | | |
| CC | expression of a target polypeptide associated with lung airway or lung | | |
| CC | dysfunction or cancer and can be anti-sense to the corresponding mRNA. | | |
| CC | The invention also describes a kit that comprises: (a) a delivery | | |
| CC | device, in separate containers, (b) the oligonucleotides, (c) | | |
| CC | instructions for adding a carrier and for use of the kit. The composition | | |
| CC | of the invention has anti-allergic, anti-inflammatory, antiasthmatic, | | |
| CC | analgesic, hypertensive, immunosuppressive and cytostatic activity, is a | | |
| CC | beta-adrenergic agonist. The composition is useful for preventing or | | |
| CC | treating a respiratory, lung or malignant disease. The administered | | |
| CC | composition comprises oligo and is administered to reduce the production | | |
| CC | or availability, or to increase the degradation of the target mRNA or to | | |
| CC | reduce the amount of target polypeptide present in the lungs. The | | |
| CC | pulmonary obstruction, and/or bronchoconstriction and/or lung | | |
| CC | inflammation, allergies and/or surfactant hypo-production are associated | | |
| CC | with a disease or condition such as pulmonary vasoconstriction. | | |

| | | | |
|----|--|---|--|
| | Query Match | 0.4%; Score 16; DB 1; Length 20; | |
| | Best Local Similarity | 100.0%; Pred. No. 1.2e+03; | |
| | Matches | 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0; | |
| QY | 2980 ACCAGGCGTTTTCGTG 2995 | | |
| DB | 17 ACCAGGCGTTTTCGTG 2 | | |
| | RESULT 1014 | | |
| ID | ADM15187/c | DNA; 20 BP. | |
| XX | ADM15187 standard; DNA; 20 BP. | | |
| AC | ADM15187; | | |
| XX | 01-JUL-2004 (first entry) | | |
| DT | Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1374. | | |
| XX | chimeric; antisense oligonucleotide; phosphorothioate; human; | | |
| KW | microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor; | | |
| KW | microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic; | | |
| KW | immunomodulator; cardiant; neuroprotective; anti-inflammatory; | | |
| KW | neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological; | | |
| KW | immunomodulatory; cardiovascular; gene therapy; inflammation; | | |
| KW | Alzheimer's disease; arthritis; diabetes; cancer; ischaemia; | | |
| KW | perfusion injury; ophthalmic disorder; immunological disorder; | | |
| KW | cardiovascular disorder; neurological disorder; ss. | | |
| XX | Homo sapiens. | | |
| OS | Synthetic. | | |
| XX | Key | Location/Qualifiers | |
| FH | modified_base | 1..20 | |
| FT | /tag= b | /mod_base= OTHER | |
| FT | /note= "phosphorothioate linkages and all cytidine | | |
| FT | residues are 5-methylcytidines" | | |
| FT | modified_base | 1..5 | |
| FT | /tag= a | /mod_base= OTHER | |
| FT | /note= "2'-O-methoxyethyls" | | |
| FT | modified_base | 16..20 | |
| FT | /tag= c | /mod_base= OTHER | |
| FT | /note= "2'-O-methoxyethyls" | | |
| PN | WO2004028458-A2. | | |
| PD | 08-APR-2004. | | |
| XX | 25-SEP-2003; 2003WO-US030374. | | |
| PR | 25-SEP-2002; 2002US-0413549P. | | |
| XX | (PHAA) PHARMACIA CORP. | | |
| PA | Gierse JK; | | |
| PI | WPI; 2004-305094/28. | | |
| DR | | | |
| XX | | | |

PT New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 XX
 XX
 PS Claim 4; SEQ ID NO 1374; 132pp; English.
 XX
 CC The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridize with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 12 A; 8 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2318 TGTGTGTGTGTGTGTG 2333
 DB 20 TGTGTGTGTGTGTGTG 5
 RESULT 1015
 ADM15240/C
 ID ADM15240 standard; DNA; 20 BP.
 XX
 AC ADM15240;
 XX
 XX 01-JUL-2004 (first entry)
 DT
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1427.
 DE
 XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT

FT
 XX
 PN WO2004028459-A2.
 XX
 PD 08-APR-2004.
 XX
 XX 25-SEP-2003; 2003WO-US030374.
 PF
 XX 25-SEP-2002; 2002US-0413549P.
 PR
 PA (PHAA) PHARMACIA CORP.
 XX
 XX Gierse JK;
 PT
 DR WPI; 2004-305094/28.
 XX
 PT New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 XX
 PS Claim 4; SEQ ID NO 1427; 132pp; English.
 CC
 CC The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridize with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 11 A; 8 C; 1 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2335 GTGTGTGTGTGTGTGT 2350
 DB 20 GTGTGTGTGTGTGTGT 5
 RESULT 1016
 ADQ96632/C.
 ID ADQ96632 standard; DNA; 20 BP.
 XX
 AC ADQ96632;
 XX
 XX 23-SEP-2004 (first entry)
 DT
 DE Human PS112 sequencing primer seqid 20.
 DE
 XX
 DE
 KW cytotatic; gene therapy; PS112; recombinant expression system;
 KW PS112 epitope; prostate disease; tumours; metastasis; predisposition;
 KW prostate cancer; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN US2004121397-A1.
 XX
 XX 24-JUN-2004.
 PD

| | |
|----|---|
| XX | |
| AC | AZ26695; |
| XX | |
| DT | 30-NOV-1999 (first entry) |
| XX | |
| DE | Human polymorphic region 894. |
| XX | |
| KW | Polyorphism; human; inhibitor; cancer; treatment; cell growth; LOH; |
| KW | cell viability; loss of heterozygosity; precancerous condition; ASI; |
| KW | allele specific inhibitor; somatic cell; diagnosis; prevention; |
| KW | atherosclerotic plaque; premalignant metaplastic lesion; endometriosis; |
| KW | dysplastic lesion; benign tumour; polycystic kidney disease; transplant; |
| KW | graft versus host disease; malignant cell removal; bone marrow; ss. |
| XX | |
| OS | Homo sapiens. |
| XX | |
| PN | WO9841648-A2. |
| XX | |
| PD | 24-SEP-1998. |
| XX | |
| PF | 19-MAR-1998; 98MO-US005419. |
| XX | |
| PR | 20-MAR-1997; 97US-0041057P. |
| XX | |
| PA | (VARI-) VARIAGENTS INC. |
| XX | |
| PI | Housman D, Ledley FD, Stanton VP; |
| XX | |
| DR | WPI; 1998-521232/44. |
| XX | |
| PT | Identifying target genes for allele-specific drugs - used for diagnosis, |
| PT | prevention and treatment of, e.g. cancers, atherosclerotic plaque, |
| PT | dysplastic lesions, endometriosis or graft versus host disease. |
| XX | |
| PS | Disclosure; Fig 7; 605pp; English. |
| XX | |
| CC | This invention describes a novel method for identifying an inhibitor |
| CC | potentially useful for treatment of cancer, where the inhibitor is active |
| CC | on a gene vital for cell growth or viability, and where the gene is |
| CC | subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is |
| CC | used for preventing the development of cancer in a patient having a |
| CC | precancerous condition, by administering to the patient a first allele |
| CC | specific inhibitor (ASI) targeted to an allele of a first essential gene |
| CC | present in cells of the precancerous condition, where the normal somatic |
| CC | cells of the patient are heterozygous for the first gene, the inhibitor |
| CC | is active on at least one but less than all allelic forms of the gene |
| CC | present in a population and targets only one allelic form present in the |
| CC | normal somatic cells, and the first gene. The products and methods can be |
| CC | used in the diagnosis, prevention and treatment of LOH disorders, e.g. |
| CC | cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic |
| CC | lesions, benign tumours, endometriosis, polycystic kidney disease, and |
| CC | graft versus host disease. The method can also be used to remove |
| CC | malignant cells from bone marrow transplants. AA225812-226825 represent |
| CC | human polymorphic sites described in the method of the invention |
| XX | |
| SQ | Sequence 21 BP; 8 A; 2 C; 6 G; 5 T; 0 U; 0 Other: |
| | |
| | Query Match 0.4%; Score 16; DB 1; Length 21; |
| | Best Local Similarity 100.0%; Pred. No. 1.3e+03; |
| | Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0; |
| | |
| QY | 1294 GTCAAGATGCTGAAG 1309 |
| DB | 6 GTCAAGATGCTGAAG 21 |
| | |
| | RESULT 1018 |
| | ADG14272 |
| ID | ADG14272 standard; DNA; 21 BP. |
| XX | |
| AC | ADG14272; |
| XX | |
| DT | 26-FEB-2004 (first entry) |

XX DE Human bcl-2 gene PCR primer, BCL-F1.
 XX KW Human; bcl-2; PCR; primer; ss.
 XX OS Homo sapiens.
 XX FN WO2003072051-A2.
 XX PD 04-SEP-2003.
 XX PF 25-FEB-2003; 2003WO-US005641.
 XX PR 27-FEB-2002; 2002US-00087229.
 XX PR 15-AUG-2002; 2002US-00222943.
 XX PA (BIOS-) BIOSOURCE INT INC.
 XX PI Chou Q, Cabradilla CD, Spasic D;
 XX WIPI; 2003-803791/75.
 XX DR Detecting the production of a primer extension product comprises using a
 PT fluorescence energy transfer (FET) labeled oligonucleotide that includes
 PT a 3'-5' exonuclease resistant quencher domain.
 XX PS Example 2; SEQ ID NO 1; 52pp; English.
 XX CC The present invention relates to a method (M1) for detecting the
 CC production of a primer extension product. M1 comprises: producing a
 CC primer extension mixture that includes a nucleic acid polymerase having
 CC 3'-5' exonuclease activity and a fluorescence energy transfer (FET)
 CC labelled oligonucleotide that includes a 3'-5' exonuclease resistant
 CC quencher domain; subjecting the mixture to primer extension reaction
 CC conditions; and detecting a change in a fluorescent signal from the FET
 CC labelled probe. The method is useful for real-time monitoring of PCR
 CC amplification reactions. The present sequence was used to illustrate the
 CC method of the invention.
 XX SQ Sequence 21 BP; 3 A; 3 C; 10 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 1.3e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1873 GTGGAGGAGCTCTTCA 1888
 DB 5 GTGGAGGAGCTCTTCA 20
 RESULT 1019
 AAQ27807
 ID AAQ27807 standard; DNA; 22 BP.
 XX AC AAQ27807;
 XX AC
 XX DT 25-MAR-2003 (revised)
 DT DT 28-JAN-1993 (first entry)
 XX PR
 DE APP exon 17 primer 5.
 XX KW Beta-amyloid protein; amyloid precursor protein; isoform; ss.
 XX OS Synthetic.
 XX PN WO9213069-A1.
 XX PD 06-AUG-1992.
 XX PF 21-JAN-1992; 92WO-GB000123.
 XX PR 21-JAN-1991; 91GB-00001307.
 PR 28-AUG-1991; 91GB-00018445.

XX PA (UNLO) IMPERIAL COLLEGE SCI TECHN MED.
 XX PI Hardy JA, Chartier-Harlin MC, Goate AM, Owen MJ, Mullan MJ;
 XX WIPI; 1992-284654/34.
 XX DR Polynucleotide probe comprising nucleic acid encoding codon 717 mutant -
 PT of human APP770, useful for determining genetic pre-disposition to
 PT Alzheimer's disease.
 XX PS Disclosure; Page 31; 127pp; English.
 XX CC The sequences given in AAQ27805-7 are primers which are complementary to
 CC intronic sequences within the amyloid precursor protein gene (APP). They
 CC were used to amplify exon 17. APP encodes various isoforms which are
 CC precursors of beta-amyloid protein. The beta-amyloid protein is an
 CC approx. 4kD protein (39-42 amino acids) which is an internal cleavage
 CC product from APP. There are five distinct isoforms of APP containing 563,
 CC 695, 714, 751 and 770 amino acids. These are generated by alternative
 CC splicing of primary transcripts of APP which is located on human
 CC chromosome 21. The APP isoforms are glycosylated transmembrane proteins.
 CC (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR-2003 to
 CC correct PI field.)
 XX SQ Sequence 22 BP; 8 A; 3 C; 3 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 22;
 Best Local Similarity 100.0%; Pred. No. 1.4e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 3365 AAATCTTCTTAATTGC 3380
 DB 6 AAATCTTCTTAATTGC 21
 RESULT 1020
 ABL56891
 ID ABL56891 standard; DNA; 30 BP.
 XX AC ABL56891;
 XX AC
 XX DT 26-JUL-2002 (first entry)
 DE DE
 DE DE
 DE DE
 KW Synthetic deoxyribonucleotide poly d.
 KW Concentration; quantification; mutation detection; polymorphic;
 KW polymerase chain reaction; PCR; ss.
 XX OS Synthetic.
 XX PN EP1046717-A2.
 XX PD 25-OCT-2000.
 XX PF 20-APR-2000; 2000EP-00108643.
 XX PR 20-APR-1999; 99JP-00111601.
 XX PA (NIBI-) JAPAN BIOINDUSTRY ASSOC.
 PA (AGEN) AGENCY OF IND SCI & TECHNOLOGY.
 PA (KANK-) KANKYO ENG CO LTD.
 XX PI Kurane R, Kanagawa T, Kamagata Y, Kurata S, Yamada K, Yokomaku T;
 PI Koyama O, Furusho K;
 DR WIPI; 2000-657765/64.
 XX PT Determining the concentration of a target nucleic acid, useful e.g. for
 PT detecting genetic mutations, comprises using a fluorescently labeled
 PT probe in which emission is reduced by binding to the target nucleic acid.
 XX PS Example 5; Page 21; 55pp; English.

XX The invention relates to the determination of a
 CC nucleic acid target, using a fluorescently labeled probe which produces
 CC reduced fluorescence emission when hybridised to the target nucleic acid.
 CC The method comprises measuring the reduction in emission caused by
 CC hybridisation. The new method is particularly used to quantify target
 CC nucleic acids by a real-time polymerase chain reaction, e.g. for
 CC quantifying microbial cells in co-cultures or symbiotic systems, for
 CC detecting gene mutations or polymorphisms, and for analysing melting
 CC curves of target nucleic acids to determine a Tm value. Methods of the
 CC invention allow target nucleic acids to be quantified quickly, easily and
 CC accurately. Particularly there is no need to remove unbound probe, and no
 CC materials are introduced that inhibit amplification by Taq polymerase (so
 CC conventional PCR conditions can be used). The specificity of PCR is kept
 CC high (amplification of primer dimers is delayed), and the limit of
 CC quantitation is reduced. Complex probes are not needed, and amplification
 CC can be monitored in real time. The working graph for data analysis
 CC (automatically generated by a computer) has a higher correlation
 CC coefficient than conventional graphs so more accurate quantitation is
 CC possible. The current sequence represents a synthetic
 CC deoxyribooligonucleotide that was used for investigating the base
 CC selectivity of a target nucleic acid
 XX
 SQ Sequence 30 BP; 4 A; 0 C; 1 G; 25 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 30;
 Best Local Similarity 79.2%; Pred. No. 1.8e+03;
 Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 3474 ATATATATATATTTTATGAGTTTTT 3497
 Db 1 ATATATATATTTTGTGTTTTT 24
 RESULT 1021
 ABL56889
 ID ABL56889 standard; DNA; 30 BP.
 AC ABL56889;
 XX
 XX 26-JUL-2002 (first entry)
 DT
 DE Synthetic deoxyribooligonucleotide poly b.
 XX Concentration; quantification; mutation detection; polymorphic;
 KW Polymerase chain reaction; PCR; ss.
 XX Synthetic.
 OS
 XX EP1046717-A2.
 PN
 PD 25-OCT-2000.
 XX
 XX 20-APR-2000; 2000EP-00108643.
 PF
 XX 20-APR-1999; 99JP-00111601.
 PR
 XX (NIBI-) JAPAN BIOINDUSTRY ASSOC.
 PA (AGEN) AGENCY OF IND SCI & TECHNOLOGY.
 PA (KANK-) KANKYO ENG CO LTD.
 XX Kurane R, Kanagawa T, Kamagata Y, Kurata S, Yamada K, Yokomaku T;
 PI Koyama O, Furusho K;
 XX WPI; 2000-657765/64.
 DR
 XX Determining the concentration of a target nucleic acid, useful e.g. for
 PT detecting genetic mutations, comprises using a fluorescently labeled
 PT probe in which emission is reduced by binding to the target nucleic acid.
 XX Example 5; Page 21; 55pp; English.
 PS
 XX The invention relates to the determination of the concentration of a

CC nucleic acid target, using a fluorescently labeled probe which produces
 CC reduced fluorescence emission when hybridised to the target nucleic acid.
 CC The method comprises measuring the reduction in emission caused by
 CC hybridisation. The new method is particularly used to quantify target
 CC nucleic acids by a real-time polymerase chain reaction, e.g. for
 CC quantifying microbial cells in co-cultures or symbiotic systems, for
 CC detecting gene mutations or polymorphisms, and for analysing melting
 CC curves of target nucleic acids to determine a Tm value. Methods of the
 CC invention allow target nucleic acids to be quantified quickly, easily and
 CC accurately. Particularly there is no need to remove unbound probe, and no
 CC materials are introduced that inhibit amplification by Taq polymerase (so
 CC conventional PCR conditions can be used). The specificity of PCR is kept
 CC high (amplification of primer dimers is delayed), and the limit of
 CC quantitation is reduced. Complex probes are not needed, and amplification
 CC can be monitored in real time. The working graph for data analysis
 CC (automatically generated by a computer) has a higher correlation
 CC coefficient than conventional graphs so more accurate quantitation is
 CC possible. The current sequence represents a synthetic
 CC deoxyribooligonucleotide that was used for investigating the base
 CC selectivity of a target nucleic acid
 XX
 SQ Sequence 30 BP; 4 A; 0 C; 1 G; 25 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 30;
 Best Local Similarity 79.2%; Pred. No. 1.8e+03;
 Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 3474 ATATATATATTTTATGAGTTTTT 3497
 Db 1 ATATATATATTTTGTGTTTTT 24
 RESULT 1022
 ABA97613
 ID ABA97613 standard; DNA; 30 BP.
 AC ABA97613;
 XX
 XX 11-APR-2002 (first entry)
 DT
 DE Poly b nucleotide sequence.
 XX ss; fluorochrome; nucleic acid probe; fluorescence.
 KW Unidentified.
 OS
 XX JP2001286300-A.
 PN
 PD 16-OCT-2001.
 XX
 XX 20-APR-2000; 2000JP-00120097.
 PF
 XX 20-APR-1999; 99JP-00111601.
 PR 24-AUG-1999; 99JP-00236666.
 PR 30-AUG-1999; 99JP-00242693.
 PR 01-FEB-2000; 2000JP-00028896.
 XX (BIOI-) BIOINDUSTRY KYOKAI SH.
 PA (KANK-) KANKYO ENG KK.
 PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.
 XX WPI; 2002-134193/18.
 DR
 XX Measurement of nucleic acids, using a nucleic acid probe and analysis of
 PT the obtained data.
 PT
 XX Example 5; Page 17; 34pp; Japanese.
 PS
 XX This invention relates to a method for measuring nucleic acids using a
 CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe
 CC decreases the fluorescence of the fluorochrome when hybridised with a
 CC target nucleic acid, the decrease in the fluorescence is measured. The
 CC method can be used for measuring a target nucleic acid

```
XX SQ Sequence 30 BP; 4 A; 0 C; 1 G; 25 T; 0 U; 0 Other;
Query Match 0.4%; Score 16; DB 1; Length 30;
Best Local Similarity 79.2%; Pred. No. 1.8e+03;
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 3474 ATATATATAATTTATTGAGTTTTT 3497
Db 1 ATATATATATTTTGTGTTTTT 24

RESULT 1023
ABA97615
ID ABA97615 standard; DNA; 30 BP.
XX
AC ABA97615;
XX
DT 11-APR-2002 (first entry)
XX
DE Poly d nucleotide sequence.
XX
KW ss; fluorochrome; nucleic acid probe; fluorescence.
XX
OS Unidentified.
XX
PN JP2001286300-A.
XX
PD 16-OCT-2001.
XX
PF 20-APR-2000; 2000JP-00120097.
XX
PR 20-APR-1999; 99JP-00111601.
PR 24-AUG-1999; 99JP-00236666.
PR 30-AUG-1999; 99JP-00242693.
PR 01-FEB-2000; 2000JP-00028896.
XX
PA (BIOI-) BIOINDUSTRY KYOKAI SH.
PA (KANK-) KANKYO ENG KK.
PA (KEIZ-) KEIZAI SANGYOUSHO SANGYO GIJUTSU SOGO KEN.
XX
WPI; 2002-134193/18.
XX
PT Measurement of nucleic acids, using a nucleic acid probe and analysis of
the obtained data.
XX
PS Example 5; Page 17; 34pp; Japanese.
XX
CC This invention relates to a method for measuring nucleic acids using a
nucleic acid probe labelled with a fluorochrome. The nucleic acid probe
decreases the fluorescence of the fluorochrome when hybridised with a
target nucleic acid, the decrease in the fluorescence is measured. The
method can be used for measuring a target nucleic acid
XX
SQ Sequence 30 BP; 4 A; 0 C; 1 G; 25 T; 0 U; 0 Other;
Query Match 0.4%; Score 16; DB 1; Length 30;
Best Local Similarity 79.2%; Pred. No. 1.8e+03;
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 3474 ATATATATAATTTATTGAGTTTTT 3497
Db 1 ATATATATATTTTGTGTTTTT 24

RESULT 1024
ABL95886
ID ABL95886 standard; DNA; 30 BP.
XX
AC ABL95886;
XX
DT 19-JUN-2002 (first entry)
XX
```

```
DE Probe poly b for assaying nucleic acids.
XX
KW Probe; polymorphism detection; mutation detection; disease diagnosis;
KW microbial identification; ss.
XX
OS Unidentified.
XX
PN WO200208414-A1.
XX
PD 31-JAN-2002.
XX
PF 27-JUN-2001; 2001WO-IB001147.
XX
PR 27-JUN-2000; 2000JP-00193133.
PR 03-AUG-2000; 2000JP-00236115.
PR 26-SEP-2000; 2000JP-00292483.
XX
PA (NARD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
PA (KANK-) KANKYO ENG CO LTD.
XX
PI Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;
PI Yokomaku T;
XX
WPI; 2002-195876/25.
XX
PT Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
PT their polymorphism and mutation, particularly useful in science and
PT medicine for e.g. analytical applications, disease diagnosis and
PT microbial identification.
XX
PS Example 12; Page 60; 152pp; Japanese.
XX
CC The present invention relates to nucleic acid probes, which are useful
CC for assaying nucleic acids by hybridising with a target nucleic acid, in
CC which a single-stranded oligonucleotide is labelled with a fluorescent
CC substance and a quencher in a manner that the fluorescence intensity of
CC the hybridisation reaction system is increased after completion of the
CC hybridisation but no stem loop structure is formed. The probes are useful
CC for assaying nucleic acids and their polymorphism and mutation,
CC particularly useful for e.g. analytical applications, disease diagnosis
CC and microbial identification. The present sequence was used to illustrate
CC the invention
XX
SQ Sequence 30 BP; 4 A; 0 C; 1 G; 25 T; 0 U; 0 Other;
Query Match 0.4%; Score 16; DB 1; Length 30;
Best Local Similarity 79.2%; Pred. No. 1.8e+03;
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 3474 ATATATATAATTTATTGAGTTTTT 3497
Db 1 ATATATATATTTTGTGTTTTT 24

RESULT 1025
ABL95888
ID ABL95888 standard; DNA; 30 BP.
XX
AC ABL95888;
XX
DT 19-JUN-2002 (first entry)
XX
DE Probe poly d for assaying nucleic acids.
XX
KW Probe; polymorphism detection; mutation detection; disease diagnosis;
KW microbial identification; ss.
XX
OS Unidentified.
XX
PN WO200208414-A1.
XX
PD 31-JAN-2002.
XX
```


CC directed primer, comprising a sequence complementary to an adaptor
CC segment. The present sequence is an example of a compound SSR primer. The
CC method represents a modified amplified fragment length polymorphism
CC assay, which is partic. useful for genome fingerprinting, i.e. for
CC genetic trait marking and germplasm comparisons
XX
SQ Sequence 19 BP; 2 A; 0 C; 7 G; 10 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2338 TGTGTGTGTGTGTGCACAT 2356
| | | | | | | | | | | | | | | | | | | | |
Db 1 TGTGTGTGTGTGTGTAT 19
RESULT 1028
AAAX0030/C
ID AAX00030 standard; DNA; 19 BP.
XX
AC AAX00030;
XX
DT 16-MAR-1999 (first entry)
XX
DE FGFR-1 PCR antisense primer.
XX
KW Neuroepithelial stem cell; lineage restricted intermediate precursor;
KW oligodendrocyte; astrocyte; self-renewal; neuron; differentiation;
KW neural crest cell; fibroblast growth factor; FGF; receptor; CNS;
KW central nervous system; glial cell; PCR primer; amplification; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9850526-A1.
XX
PD 12-NOV-1998.
XX
PF 07-MAY-1998; 98WO-US009630.
XX
PR 07-MAY-1997; 97US-00852744.
PR 06-MAY-1998; 98US-00073881.
XX
PA (UTAH) UNIV UTAH RES FOUND.
XX
PI Rao MS, Mayer-Proschel M, Muftaba T;
XX WPI; 1999-070093/06.
XX
PT Mammalian neuroepithelial stem cells and glial restricted precursor - can
PT self renew and differentiate into central nervous system cells, used for
PT generating various types of cells.
XX
PS Example 26; Page 57; 78pp; English.
XX
CC The present invention describes an isolated, pure population of mammalian
CC neuroepithelial stem cells, which are capable of self-renewal in adherent
CC feeder-cell-independent (AFCI) culture medium and differentiation to
CC central nervous system (CNS) neuronal or glial cells and to neuronal
CC crest stem cells. Also described is an isolated population of mammalian
CC CNS glial-restricted precursor (GRP) cells which can self-renew in the
CC APCI culture medium and can differentiate to CNS glial cells but not to
CC CNS neuronal cells. The stem cells can be used to generate a population
CC of mammalian motor neurons by incubating the stem cells in a medium
CC promoting cell proliferation and neuronal differentiation. The medium
CC comprises laminin-coated plates and NEP medium lacking chick embryo
CC extract. The stem cells can also produce neural crest stem cells by
CC inducing the cells to differentiate in vitro. The inducing step comprises
CC replating the cells on a laminin-coated substrate and preferably
CC withdrawing a mitogen (preferably fibroblast growth factor; FGF) and
CC chick embryo extract. Inducing can also comprise adding a dorsalizing
CC agent to the cells, preferably a bone morphogenetic protein (BMP) such as

CC BMP-2, -4 or -7. The stem cells can be used to produce cells of the
CC peripheral nervous system, by inducing the stem cells to differentiate in
CC vitro to neural crest stem cells, and inducing these cells to
CC differentiate. AAX00029 to AAX00054 represent PCR primers which are used
CC in an example from the present invention to amplify different FGF and
CC FGFR genes
XX
SQ Sequence 19 BP; 3 A; 10 C; 5 G; 1 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1210 GGGGAGGGCTGCTTGGCC 1228
| | | | | | | | | | | | | | | | | | | | |
Db 19 GCGGAGGGCTGCTTGGGC 1
RESULT 1029
AAA85805
ID AAA85805 standard; DNA; 19 BP.
XX
AC AAA85805;
XX
DT 04-DEC-2000 (first entry)
XX
DE Cyclin B1 ribozyme binding site #134.
XX
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX Mammalia.
XX
PN WO200032765-A2.
XX
PD 08-JUN-2000.
XX
PF 06-DEC-1999; 99WO-US028772.
XX
PR 04-DEC-1998; 98US-0110954P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX WPI; 2000-412314/35.
XX
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
PS Disclosure; Page 98; 109pp; English.
XX
CC The present invention relates to a hairpin or hammerhead ribozyme
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
SQ Sequence 19 BP; 1 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2548 GCTCGGCGCTCTGCTTTCG 2566
| | | | | | | | | | | | | | | | | | | | |
Db 1 GGTGCGGCGCTCTGCTTTCG 19
RESULT 1030

AA088240/C
ID AAC88240 standard; DNA; 19 BP.
XX
AC AAC88240;
XX
DT 02-MAR-2001 (first entry)
XX
DE Murine lineage-restricted precursor cell population PCR primer #18.
XX
KW Mouse; lineage restricted precursor cell; neuron-restricted precursor;
KW NRP; glial-restricted precursor; GRP; mouse neural tube; transplantation;
KW antibody; PCR primer; ss.
XX
OS Mus sp.
XX
PN WO200068359-A1.
XX
PD 16-NOV-2000.
XX
PF 05-MAY-2000; 2000WO-US012446.
XX
PR 07-MAY-1999; 99US-0133159P.
XX
PA (UTAH) UNIV UTAH RES FOUND.
XX
PI Mujtaba T, Rao MS;
XX
DR WPI; 2001-024863/03.
XX
PT New pure populations of neuron- or glial-restricted precursor cells and
PT neuroepithelial stem cells from mouse neural tubes or embryonic stem
PT cells for developing new drugs or techniques that enhance survival of
PT transplanted cell.
XX
PS Example 8; Page 22; 37pp; English.
XX
CC The present invention provides populations of lineage-restricted
CC precursor cells from mouse neural tube and mouse embryonic stem cells.
CC These populations are of neuron-restricted precursor cells (NRPs) and
CC glial-restricted precursor cells (GRPs). These cell populations are
CC useful in the development of new transplant techniques, for
CC transplantation in diseases where neuronal or glial degeneration has
CC occurred, in the identification of drugs which enhance the survival and
CC proliferation of transplanted cells, to identify genes specific to
CC selected stages of development, and in the generation of cell-specific
CC antibodies
XX
SQ Sequence 19 BP; 3 A; 10 C; 5 G; 1 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1210 GGGAGGGCTGCTTCGGCC 1228
DB 19 GGGAGGGCTGCTTCGGCC 1
RESULT 1031
AAH60967
ID AAH60967 standard; DNA; 19 BP.
XX
AC AAH60967;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cyclin B1 ribozyme binding site SEQ ID NO:3391.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulvular;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;

KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antiscaling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 318; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiscaling,
CC ophthalmological, vulvular, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 1 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2548 GCTCGGCTCTGCTTCGTC 2566
DB 1 GCTCGGCTCTGCTTCGTC 19
RESULT 1032
ADE27213
ID ADE27213 standard; RNA; 19 BP.
XX
AC ADE27213;
XX
DT 29-JAN-2004 (first entry)
XX
DE Stearoyl-CoA desaturase siRNA oligonucleotide SEQ ID NO:157.
XX
KW short interfering nucleic acid; siRNA; downregulation; inhibition; SCD;
KW stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;

XX atherosclerosis; cancer; viral infection; drug screening;
 XX genetic engineering; pharmacogenomic; gene mapping; ss.
 OS Synthetic.
 XX WO2003070885-A2.
 PN
 XX
 XX 28-AUG-2003.
 PD
 XX
 XX 13-FEB-2003; 2003WO-US004317.
 PF
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 PR
 XX 11-MAR-2002; 2002US-0363124P.
 PR
 XX 06-JUN-2002; 2002US-0386782P.
 PR
 XX 29-AUG-2002; 2002US-0406784P.
 PR
 XX 05-SEP-2002; 2002US-0408378P.
 PR
 XX 09-SEP-2002; 2002US-0409293P.
 PR
 XX 20-SEP-2002; 2002US-0412304P.
 PR
 XX 15-JAN-2003; 2003US-0440129P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA
 XX
 XX Mcswiggen J, Beigelman L, Thompson J;
 PI
 XX WPI; 2003-721687/68.
 DR

XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of obesity or diabetes, downregulates expression of the
 PT stearyl-CoA desaturase gene.
 PT
 XX
 XX Example 3; SEQ ID NO 157; 139pp; English.
 PS
 XX
 XX The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene
 CC by RNA interference. Also described: (1) modulating expression of SCD
 CC genes in cells, tissue explants or organisms by introduction of SCD
 CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
 CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
 CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
 CC virucide activities. The siNAs can be used to modulate expression of SCD
 CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
 CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
 CC They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents an SCD siNA, which is
 CC used in the exemplification of the present invention.
 CC
 XX Sequence 19 BP; 4 A; 5 C; 7 G; 0 T; 3 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 73.7%; Pred. No. 1.2e+03;
 Matches 14; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
 QY 784 TACACCTGCTCGCGGCA 802
 :|||:|||||
 Db 1 UACAACTGCTCGCGGCA 19

RESULT 1033
 ADE27503/C
 ID ADE27503 standard; RNA; 19 BP.
 XX
 XX ADE27503;
 AC
 XX
 XX 29-JAN-2004 (first entry)
 DT
 XX
 XX Stearyl-CoA desaturase siNA oligonucleotide SEQ ID NO:447.
 DE
 XX
 XX short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
 KW stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
 KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
 KW atherosclerosis; cancer; viral infection; drug screening;

XX genetic engineering; pharmacogenomic; gene mapping; ss.
 XX Synthetic.
 XX WO2003070885-A2.
 PN
 XX
 XX 28-AUG-2003.
 PD
 XX
 XX 13-FEB-2003; 2003WO-US004317.
 PF
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 PR
 XX 11-MAR-2002; 2002US-0363124P.
 PR
 XX 06-JUN-2002; 2002US-0386782P.
 PR
 XX 29-AUG-2002; 2002US-0406784P.
 PR
 XX 05-SEP-2002; 2002US-0408378P.
 PR
 XX 09-SEP-2002; 2002US-0409293P.
 PR
 XX 20-SEP-2002; 2002US-0412304P.
 PR
 XX 15-JAN-2003; 2003US-0440129P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA
 XX
 XX Mcswiggen J, Beigelman L, Thompson J;
 PI
 XX WPI; 2003-721687/68.
 DR

XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of obesity or diabetes, downregulates expression of the
 PT stearyl-CoA desaturase gene.
 PT
 XX
 XX Example 3; SEQ ID NO 447; 139pp; English.
 PS
 XX
 XX The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene
 CC by RNA interference. Also described: (1) modulating expression of SCD
 CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
 CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
 CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
 CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
 CC virucide activities. The siNAs can be used to modulate expression of SCD
 CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
 CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
 CC They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents an SCD siNA, which is
 CC used in the exemplification of the present invention.
 CC
 XX Sequence 19 BP; 3 A; 7 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.2e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 784 TACACCTGCTCGCGGCA 802
 :|||:|||||
 Db 19 TACAACCTGCTCGCGGCA 1

RESULT 1034
 ADF35869
 ID ADF35869 standard; RNA; 19 BP.
 XX
 XX ADF35869;
 AC
 XX
 XX 12-FEB-2004 (first entry)
 DT
 XX
 XX Human VEGFR1 short interfering nucleic acid (siNA) SEQ ID NO:158.
 DE
 XX
 XX double-stranded short interfering nucleic acid;
 KW short interfering nucleic acid; siNA; downregulation;
 KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
 KW cytostatic; antidiabetic; ophthalmological; antiarthritic; antiporiatic;
 KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;

KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
 KW arthritis; psoriasis; endometriosis; angiofibroma;
 KW polycystic kidney disease; ss.

XX Synthetic.
 OS Homo sapiens.

XX WO2003070910-A2.

XX 28-AUG-2003.

XX 20-FEB-2003; 2003WO-US005022.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 29-MAY-2002; 2002WO-US017674.

XX 06-JUN-2002; 2002US-0386782P.

XX 03-JUL-2002; 2002US-0393796P.

XX 29-JUL-2002; 2002US-0399348P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 04-NOV-2002; 2002US-00287949.

XX 27-NOV-2002; 2002US-00306747.

XX 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L, Pavco P;

XX WPI; 2003-679876/64.

XX New double-stranded interfering nucleic acid, useful e.g. for treatment

XX and diagnosis of cancer, downregulates the vascular endothelial growth

XX factor receptor gene.

XX Example 3; SEQ ID NO 158; 207pp; English.

XX The present invention describes a double-stranded short interfering
 CC nucleic acid (siNA) that downregulates expression of the vascular
 CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
 CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
 CC that express siNA; and (5) single-stranded siNA with similar properties.
 CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
 CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
 CC gynaecological activities. The siNA are useful for modulating
 CC (downregulating) the expression of VEGFR genes. The siNA are potentially
 CC useful for treating a wide range of angiogenesis-associated conditions,
 CC particularly cancers, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
 CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
 CC drug screening, target identification and validation, genetic
 CC engineering, studying gene function, and also for gene mapping (e.g. of
 CC single-nucleotide polymorphisms). The present sequence is used in the
 CC exemplification of the present invention.

XX Sequence 19 BP; 8 A; 1 C; 7 G; 0 T; 3 U; 0 Other;

XX Query Match 0.4%; Score 15.8; DB 1; Length 19;

XX Best Local Similarity 73.7%; Pred. No. 1.2e+03;

XX Matches 14; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 1294 GTCAAGATGCTGAAGACG 1312

Db 1 GUGAAAAUUGCUAAGAGG 19

RESULT 1035

ADF36296/C

ID ADF36296 standard; RNA; 19 BP.

XX ADF36296;

XX

DT

XX

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XX

KW

KW

KW

KW

KW

KW

KW

KW

XX

OS

XX

PN

XX

PD

XX

PF

XX

XX

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PR

PA

XX

XX

PI

XX

XX

DR

XX

XX

XX

PT

PT

PT

XX

XX

PS

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12-FEB-2004 (first entry)

Human VEGFR1 short interfering nucleic acid (siNA) SEQ ID NO:585.

double-stranded short interfering nucleic acid;

short interfering nucleic acid; siNA; downregulation;

vascular endothelial growth factor receptor; VEGFR; antiangiogenic;

cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;

nephrotropic; gynaecological; angiogenesis-associated condition; cancer;

diabetic retinopathy; macular degeneration; neovascular glaucoma;

arthritis; psoriasis; endometriosis; angiofibroma;

polycystic kidney disease; ss.

Synthetic.

Homo sapiens.

WO2003070910-A2.

28-AUG-2003.

20-FEB-2003; 2003WO-US005022.

20-FEB-2002; 2002US-0358580P.

11-MAR-2002; 2002US-0363124P.

29-MAY-2002; 2002WO-US017674.

06-JUN-2002; 2002US-0386782P.

03-JUL-2002; 2002US-0393796P.

29-JUL-2002; 2002US-0399348P.

29-AUG-2002; 2002US-0406784P.

05-SEP-2002; 2002US-0408378P.

09-SEP-2002; 2002US-0409293P.

04-NOV-2002; 2002US-00287949.

27-NOV-2002; 2002US-00306747.

15-JAN-2003; 2003US-0440129P.

(RIBO-) RIBOZYME PHARM INC.

Mcswiggen J, Beigelman L, Pavco P;

WPI; 2003-679876/64.

New double-stranded interfering nucleic acid, useful e.g. for treatment

and diagnosis of cancer, downregulates the vascular endothelial growth

factor receptor gene.

Example 3; SEQ ID NO 585; 207pp; English.

The present invention describes a double-stranded short interfering

nucleic acid (siNA) that downregulates expression of the vascular

endothelial growth factor receptor (VEGFR) gene. Also described: (1) a

siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo

delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors

that express siNA; and (5) single-stranded siNA with similar properties.

The siNAs have antiangiogenic, cytostatic, antidiabetic,

ophthalmological, antiarthritic, antipsoriatic, nephrotropic and

gynaecological activities. The siNA are useful for modulating

(downregulating) the expression of VEGFR genes. The siNA are potentially

useful for treating a wide range of angiogenesis-associated conditions,

particularly cancers, diabetic retinopathy, macular degeneration,

neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,

and polycystic kidney disease. The siNA may also be useful for diagnosis,

drug screening, target identification and validation, genetic

engineering, studying gene function, and also for gene mapping (e.g. of

single-nucleotide polymorphisms). The present sequence is used in the

exemplification of the present invention.

Sequence 19 BP; 3 A; 7 C; 1 G; 0 T; 8 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 19;

Best Local Similarity 89.5%; Pred. No. 1.2e+03;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1294 GTGAAGATGCTGAAGAGC 1312
 Db 19 GTGAAGATGCTGAAGAGG 1

RESULT 1036
 ADF37361
 ID ADF37361 standard; RNA; 19 BP.
 XX
 AC ADF37361;
 DT 12-FEB-2004 (first entry)
 XX
 DE Human VEGFR3 short interfering nucleic acid (siNA) SEQ ID NO:1650.
 XX
 KW double-stranded short interfering nucleic acid;
 KW short interfering nucleic acid; siNA; downregulation;
 KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
 KW cytotatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
 KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
 KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
 KW arthritis; psoriasis; endometriosis; angiofibroma;
 KW polycystic kidney disease; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO2003070910-A2.
 XX
 PD 28-AUG-2003.
 XX
 PF 20-FEB-2003; 2003WO-US005022.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 29-MAY-2002; 2002WO-US017674.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 03-JUL-2002; 2002US-0393796P.
 PR 29-JUL-2002; 2002US-0399348P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 04-NOV-2002; 2002US-00287949.
 PR 27-NOV-2002; 2002US-00306747.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswiggen J, Beigelman L, Pavco P;
 XX
 DR WPI; 2003-679876/64.
 XX
 PT New double-stranded interfering nucleic acid, useful e.g. for treatment
 PT and diagnosis of cancer, downregulates the vascular endothelial growth
 PT factor receptor gene.
 XX
 PS Example 3; SEQ ID NO 1650; 207pp; English.
 XX
 CC The present invention describes a double-stranded short interfering
 CC nucleic acid (siNA) that downregulates expression of the vascular
 CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
 CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
 CC delivery of siNA; and (5) single-stranded siNA with similar properties.
 CC The siNAs have antiangiogenic, cytotatic, antidiabetic,
 CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
 CC gynaecological activities. The siNA are useful for modulating
 CC (downregulating) the expression of VEGFR genes. The siNA are potentially
 CC useful for treating a wide range of angiogenesis-associated conditions,
 CC particularly cancers, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
 CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
 CC drug screening, target identification and validation, genetic

CC engineering, studying gene function, and also for gene mapping (e.g. of
 CC single-nucleotide polymorphisms). The present sequence is used in the
 CC exemplification of the present invention.
 XX
 SQ Sequence 19 BP; 5 A; 3 C; 7 G; 0 T; 4 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 68.4%; Pred. No. 1.2e+03;
 Matches 13; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
 QY 1288 GTAGCGTGAAGATGCTGA 1306
 Db 1 GUGGCCGUGAAAAUGCUGA 19

RESULT 1037
 ADF37398
 ID ADF37398 standard; RNA; 19 BP.
 XX
 AC ADF37398;
 XX
 DT 12-FEB-2004 (first entry)
 XX
 DE Human VEGFR3 short interfering nucleic acid (siNA) SEQ ID NO:1687.
 XX
 KW double-stranded short interfering nucleic acid;
 KW short interfering nucleic acid; siNA; downregulation;
 KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
 KW cytotatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
 KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
 KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
 KW arthritis; psoriasis; endometriosis; angiofibroma;
 KW polycystic kidney disease; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO2003070910-A2.
 XX
 PD 28-AUG-2003.
 XX
 PF 20-FEB-2003; 2003WO-US005022.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 29-MAY-2002; 2002WO-US017674.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 03-JUL-2002; 2002US-0393796P.
 PR 29-JUL-2002; 2002US-0399348P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 04-NOV-2002; 2002US-00287949.
 PR 27-NOV-2002; 2002US-00306747.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswiggen J, Beigelman L, Pavco P;
 XX
 DR WPI; 2003-679876/64.
 XX
 PT New double-stranded interfering nucleic acid, useful e.g. for treatment
 PT and diagnosis of cancer, downregulates the vascular endothelial growth
 PT factor receptor gene.
 XX
 PS Example 3; SEQ ID NO 1687; 207pp; English.
 XX
 CC The present invention describes a double-stranded short interfering
 CC nucleic acid (siNA) that downregulates expression of the vascular
 CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
 CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
 CC that express siNA; and (5) single-stranded siNA with similar properties.
 CC The siNAs have antiangiogenic, cytotatic, antidiabetic,
 CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
 CC gynaecological activities. The siNA are useful for modulating
 CC (downregulating) the expression of VEGFR genes. The siNA are potentially
 CC useful for treating a wide range of angiogenesis-associated conditions,
 CC particularly cancers, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
 CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
 CC drug screening, target identification and validation, genetic

| | | | |
|-------------|---|-------------|---|
| CC | that express siNA; and (5) single-stranded siNA with similar properties. | PT | and diagnosis of cancer, downregulates the vascular endothelial growth |
| CC | The siNAs have antiangiogenic, cytostatic, antidiabetic, | PT | factor receptor gene. |
| CC | ophthalmological, antiarthritic, antipsoriatic, nephrotropic and | XX | |
| CC | gynaecological activities. The siNA are useful for modulating | PS | Example 3; SEQ ID NO 1897; 207pp; English. |
| CC | (downregulating) the expression of VEGFR genes. The siNA are potentially | XX | |
| CC | useful for treating a wide range of angiogenesis-associated conditions, | CC | The present invention describes a double-stranded short interfering |
| CC | particularly cancers, diabetic retinopathy, macular degeneration, | CC | nucleic acid (siNA) that downregulates expression of the vascular |
| CC | neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma, | CC | endothelial growth factor receptor (VEGFR) gene. Also described: (1) a |
| CC | and polycystic kidney disease. The siNA may also be useful for diagnosis, | CC | siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo |
| CC | drug screening, target identification and validation, genetic | CC | delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors |
| CC | engineering, studying gene function, and also for gene mapping (e.g. of | CC | that express siNA; and (5) single-stranded siNA with similar properties. |
| CC | single-nucleotide polymorphisms). The present sequence is used in the | CC | The siNAs have antiangiogenic, cytostatic, antidiabetic, |
| CC | exemplification of the present invention. | CC | ophthalmological, antiarthritic, antipsoriatic, nephrotropic and |
| CC | | CC | (downregulating) the expression of VEGFR genes. The siNA are potentially |
| CC | | CC | useful for treating a wide range of angiogenesis-associated conditions, |
| CC | | CC | particularly cancers, diabetic retinopathy, macular degeneration, |
| CC | | CC | neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma, |
| CC | | CC | and polycystic kidney disease. The siNA may also be useful for diagnosis, |
| CC | | CC | drug screening, target identification and validation, genetic |
| CC | | CC | engineering, studying gene function, and also for gene mapping (e.g. of |
| CC | | CC | single-nucleotide polymorphisms). The present sequence is used in the |
| CC | | CC | exemplification of the present invention. |
| SX | | SX | |
| QY | 1807 TGGTCCTTTGGGCTCCTGC 1825 | QY | 1288 GTAGCCGTGAAGATGCTGA 1306 |
| Db | 1 UGUCUCCUUGGGUGGUCUC 19 | Db | 19 GTGGCCGTGAAATGCTGA 1 |
| RESULT 1038 | | RESULT 1039 | |
| ADF37608/c | | ADF37646/c | |
| ID | ADF37608 standard; RNA; 19 BP. | ID | ADF37646 standard; RNA; 19 BP. |
| XX | | XX | |
| AC | ADF37608; | AC | ADF37646; |
| DT | 12-FEB-2004 (first entry) | DT | 12-FEB-2004 (first entry) |
| XX | | XX | |
| DE | Human VEGFR3 short interfering nucleic acid (siNA) SEQ ID NO:1897. | DE | Human VEGFR3 short interfering nucleic acid (siNA) SEQ ID NO:1935. |
| XX | | XX | |
| KW | double-stranded short interfering nucleic acid; | KW | double-stranded short interfering nucleic acid; |
| KW | short interfering nucleic acid; siNA; downregulation; | KW | short interfering nucleic acid; siNA; downregulation; |
| KW | vascular endothelial growth factor receptor; VEGFR; antiangiogenic; | KW | vascular endothelial growth factor receptor; VEGFR; antiangiogenic; |
| KW | cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; | KW | cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; |
| KW | nephrotropic; gynaecological; angiogenesis-associated condition; cancer; | KW | nephrotropic; gynaecological; angiogenesis-associated condition; cancer; |
| KW | diabetic retinopathy; macular degeneration; neovascular glaucoma; | KW | diabetic retinopathy; macular degeneration; neovascular glaucoma; |
| KW | arthritis; psoriasis; endometriosis; angiofibroma; | KW | arthritis; psoriasis; endometriosis; angiofibroma; |
| KW | polycystic kidney disease; ss. | KW | polycystic kidney disease; ss. |
| OS | Synthetic. | XX | |
| OS | Homo sapiens. | OS | Synthetic. |
| XX | | OS | Homo sapiens. |
| PN | WO2003070910-A2. | XX | |
| XX | | XX | |
| PD | 28-AUG-2003. | PN | WO2003070910-A2. |
| XX | | XX | |
| PF | 20-FEB-2003; 2003WO-US005022. | PD | 28-AUG-2003. |
| XX | | XX | |
| PR | 20-FEB-2002; 2002US-0358580P. | PF | 20-FEB-2003; 2003WO-US005022. |
| PR | 11-MAR-2002; 2002US-0363124P. | XX | |
| PR | 29-MAY-2002; 2002WO-US017674. | XX | 20-FEB-2002; 2002US-0358580P. |
| PR | 06-JUN-2002; 2002US-0386782P. | PR | 11-MAR-2002; 2002US-0363124P. |
| PR | 03-JUL-2002; 2002US-0393796P. | PR | 29-MAY-2002; 2002WO-US017674. |
| PR | 29-JUL-2002; 2002US-0399348P. | PR | 06-JUN-2002; 2002US-0386782P. |
| PR | 29-AUG-2002; 2002US-0406784P. | PR | 03-JUL-2002; 2002US-0393796P. |
| PR | 05-SEP-2002; 2002US-0408378P. | PR | 29-JUL-2002; 2002US-0399348P. |
| PR | 04-NOV-2002; 2002US-0409293P. | PR | 29-AUG-2002; 2002US-0406784P. |
| PR | 27-NOV-2002; 2002US-00306747. | PR | 05-SEP-2002; 2002US-0408378P. |
| PR | 15-JAN-2003; 2003US-0440129P. | PR | 04-NOV-2002; 2002US-0409293P. |
| XX | | PR | 27-NOV-2002; 2002US-00306747. |
| XX | | PR | 15-JAN-2003; 2003US-0440129P. |
| XX | (RIBO-) RIBOZYME PHARM INC. | XX | |
| XX | | XX | |
| PI | Mcswiggen J, Beigelman L, Pavco P; | XX | |
| XX | | XX | |
| DR | WPI; 2003-679876/64. | XX | |
| XX | | XX | |
| PT | New double-stranded interfering nucleic acid, useful e.g. for treatment | XX | |

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PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
XX Mswiggen J, Beigelman L, Pavco P;
XX WPI; 2003-679876/64.
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
XX and diagnosis of cancer, downregulates the vascular endothelial growth
XX factor receptor gene.
XX Example 3; SEQ ID NO 1935; 207pp; English.
XX The present invention describes a double-stranded short interfering
XX nucleic acid (siNA) that downregulates expression of the vascular
XX endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
XX siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
XX delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
XX that express siNA; and (5) single-stranded siNA with similar properties.
XX The siNAs have antiangiogenic, cytostatic, antiarthritic, antidiabetic,
XX ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
XX gynaecological activities. The siNA are useful for modulating
XX (downregulating) the expression of VEGFR genes. The siNA are potentially
XX useful for treating a wide range of angiogenesis-associated conditions,
XX particularly cancers, diabetic retinopathy, macular degeneration,
XX neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
XX and polycystic kidney disease. The siNA may also be useful for diagnosis,
XX drug screening, target identification and validation, genetic
XX engineering, studying gene function, and also for gene mapping (e.g. of
XX single-nucleotide polymorphisms). The present sequence is used in the
XX exemplification of the present invention.
XX Sequence 19 BP; 7 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.8; DB 1; Length 19;
XX Best Local Similarity 89.5%; Pred. No. 1.2e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1825 CTCCTGGAGATCTTCACGC 1843
XX |||||
XX 19 CTCCTGGAGATCTTCCTC 1
XX
XX RESULT 1040
XX ADF37399
XX ID ADF37399 standard; RNA; 19 BP.
XX AC ADF37399;
XX DT 12-FEB-2004 (first entry)
XX DE Human VEGFR3 short interfering nucleic acid (siNA) SEQ ID NO:1688.
XX
XX KW double-stranded short interfering nucleic acid;
XX KW short interfering nucleic acid; siNA; downregulation;
XX KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
XX KW cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
XX KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
XX KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
XX KW arthritis; psoriasis; endometriosis; angiofibroma;
XX KW polycystic kidney disease; ss.
XX
XX OS Synthetic.
XX OS Homo sapiens.
XX
XX PN W02003070910-A2.
XX
XX PD 28-AUG-2003.
XX
XX PF 20-FEB-2003; 2003WO-US0005022.
XX

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PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 29-MAY-2002; 2002WO-US017674.
PR 06-JUN-2002; 2002US-0386782P.
PR 03-JUL-2002; 2002US-0393796P.
PR 29-JUL-2002; 2002US-0399348P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 04-NOV-2002; 2002US-00287949.
PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mswiggen J, Beigelman L, Pavco P;
XX WPI; 2003-679876/64.
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
XX and diagnosis of cancer, downregulates the vascular endothelial growth
XX factor receptor gene.
XX Example 3; SEQ ID NO 1688; 207pp; English.
XX The present invention describes a double-stranded short interfering
XX nucleic acid (siNA) that downregulates expression of the vascular
XX endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
XX siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
XX delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
XX that express siNA; and (5) single-stranded siNA with similar properties.
XX The siNAs have antiangiogenic, cytostatic, antiarthritic, antidiabetic,
XX ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
XX gynaecological activities. The siNA are useful for modulating
XX (downregulating) the expression of VEGFR genes. The siNA are potentially
XX useful for treating a wide range of angiogenesis-associated conditions,
XX particularly cancers, diabetic retinopathy, macular degeneration,
XX neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
XX and polycystic kidney disease. The siNA may also be useful for diagnosis,
XX drug screening, target identification and validation, genetic
XX engineering, studying gene function, and also for gene mapping (e.g. of
XX single-nucleotide polymorphisms). The present sequence is used in the
XX exemplification of the present invention.
XX Sequence 19 BP; 2 A; 6 C; 4 G; 0 T; 7 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.8; DB 1; Length 19;
XX Best Local Similarity 63.2%; Pred. No. 1.2e+03;
XX Matches 12; Conservative 5; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1825 CTCCTGGAGATCTTCACGC 1843
XX |||||
XX 1 CUCUGGGAGAUUCUUCUC 19
XX
XX Db
XX
XX RESULT 1041
XX ADF37645/c
XX ID ADF37645 standard; RNA; 19 BP.
XX AC ADF37645;
XX DT 12-FEB-2004 (first entry)
XX DE Human VEGFR3 short interfering nucleic acid (siNA) SEQ ID NO:1934.
XX
XX KW double-stranded short interfering nucleic acid;
XX KW short interfering nucleic acid; siNA; downregulation;
XX KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
XX KW cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
XX KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
XX KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
XX KW arthritis; psoriasis; endometriosis; angiofibroma;
XX KW polycystic kidney disease; ss.

```

XX OS Synthetic.
OS Homo sapiens.
XX WO2003070910-A2.
XX PD 28-AUG-2003.
XX PF 20-FEB-2003; 2003WO-US005022.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 29-MAY-2002; 2002WO-US017674.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 03-JUL-2002; 2002US-0393796P.
XX PR 29-JUL-2002; 2002US-0399348P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 04-NOV-2002; 2002US-00287949.
XX PR 27-NOV-2002; 2002US-00306747.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J, Beigelman L, Pavco P;
XX DR WPI; 2003-679876/64.
XX PT New double-stranded interfering nucleic acid, useful e.g. for treatment
XX PT and diagnosis of cancer, downregulates the vascular endothelial growth
XX PT factor receptor gene.
XX PS Example 3; SEQ ID NO 1934; 207pp; English.
XX CC The present invention describes a double-stranded short interfering
XX CC nucleic acid (siRNA) that downregulates expression of the vascular
XX CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
XX CC siRNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
XX CC delivery of siRNA; (3) conjugates and/or complexes of siRNA; (4) vectors
XX CC that express siRNA; and (5) single-stranded siRNA with similar properties.
XX CC The siRNAs have antiangiogenic, cytostatic, antidiabetic,
XX CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
XX CC gynaecological activities. The siRNA are useful for modulating
XX CC (downregulating) the expression of VEGFR genes. The siRNA are potentially
XX CC useful for treating a wide range of angiogenesis-associated conditions,
XX CC particularly cancers, diabetic retinopathy, macular degeneration,
XX CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiodysplasia,
XX CC and polycystic kidney disease. The siRNA may also be useful for diagnosis,
XX CC drug screening, target identification and validation, genetic
XX CC engineering, studying gene function, and also for gene mapping (e.g. of
XX CC single-nucleotide polymorphisms). The present sequence is used in the
XX CC exemplification of the present invention.
XX SQ Sequence 19 BP; 8 A; 7 C; 4 G; 0 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1807 TGGTCCTTGGGCTCGC 1825
|||||
Db 19 TGGTCCTTGGGCTCGC 1
RESULT 1042
ADF47880/c
ID ADF47880 standard; RNA; 19 BP.
XX AC ADF47880;
XX DT 12-FEB-2004 (first entry)
XX

DE Human Myc transcript target sequence/siRNA upper strand, SEQ ID 17.
XX Human; Myc; Myb; cancer; proliferative disease; restenosis;
KW polycystic kidney disease; RNA interference;
KW short interfering nucleic acid; siRNA; short interfering RNA; siRNA;
KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
KW expression modulation; gene therapy; drug screening; diagnosis;
KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; cytostatic; vasotropic;
KW nephrotropic; ss.
XX Homo sapiens.
OS WO2003070917-A2.
XX PN 28-AUG-2003.
PD 20-FEB-2003; 2003WO-US005326.
XX PF 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-OCT-2002; 2002US-0418655P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J, Beigelman L;
XX DR WPI; 2003-689784/65.
XX PT New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of cancer, downregulates expression of Myc or Myb genes.
XX PS Example 7; Page 126; 161pp; English.
XX CC The invention relates to short interfering nucleic acids (siRNA) which
XX CC downregulate expression of the human Myc or Myb genes by RNA
XX CC interference. The siRNAs may or may not comprise ribonucleotides and may
XX CC be double or single stranded. They further comprise sense and antisense
XX CC regions, or alternatively are assembled from a sense oligonucleotide and
XX CC an antisense oligonucleotide. Specifically, the siRNAs include short
XX CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,
XX CC can contain deoxyribonucleotides, and can be chemically synthesised,
XX CC expressed from a vector or enzymatically synthesised. The invention also
XX CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates
XX CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are
XX CC used to modulate expression of the Myc or Myb genes in cells, tissue
XX CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX CC transplants for the treatment of a variety of conditions. They may be
XX CC used for treating cancers and other proliferative diseases, such as
XX CC restenosis and polycystic kidney disease. The siRNAs are also useful for
XX CC drug screening, diagnosis, therapeutic target identification and
XX CC validation, genetic engineering, pharmacogenomics, studying gene
XX CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
XX CC The present sequence represents the upper strand of a human Myc-targeted
XX CC double-stranded siRNA, which is identical to the Myc transcript target
XX CC sequence.
XX SQ Sequence 19 BP; 2 A; 10 C; 3 G; 0 T; 4 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1950 GATCATGCGGAGTGTCTGG 1968
|||||
Db 19 GATCAAGCGGAGGCTGG 1


```
Query Match      0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 1.2e+03;
Matches 15; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1617 CCACAGGACCTGGCTGCC 1635
DB 1 CCACAGACCTGGCTGCC 19

RESULT 1047
ID ADF31804/C
XX ADF31804 standard; RNA; 19 BP.
AC ADF31804;
XX
DT 12-FEB-2004 (first entry)
DE Human IGF-1R siRNA lower strand, SEQ ID NO:469.
XX
KW RNA interference; short interfering nucleic acid; siRNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; cancer;
KW proliferative disease; restenosis; polycystic kidney disease;
KW inflammatory disease; allergic disease; autoimmune disease;
KW transplant rejection; cytostatic; vasotropic; nephrotropic;
KW antiinflammatory; antiallergic; immunosuppressive; human;
KW insulin-like growth factor 1 receptor; IGF-1R; ss.
XX
OS Homo sapiens.
XX
PN WO2003070911-A2.
PD 28-AUG-2003.
PF 20-FEB-2003; 2003WO-US0005044.
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Chowrira B;
XX
DR WPI; 2003-721691/68.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of the insulin-like growth
PT factor-1 receptor gene.
XX
PS Example 3; SEQ ID NO 469; 147pp; English.
XX
CC The invention relates to short interfering nucleic acids (siRNA) which
CC downregulate expression of the human insulin-like growth factor 1
CC receptor (IGF-1R) gene by RNA interference. The siRNAs may or may not
CC comprise ribonucleotides and may be double or single stranded. They
CC further comprise sense and antisense regions, or alternatively are
CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
CC Specifically, the siRNAs include short interfering RNA (siRNA), double-
CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siRNAs
CC can be unmodified or chemically modified, can contain
CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
CC vector or enzymatically synthesised. The invention also relates to kits
CC for the in vitro or in vivo delivery of siRNA; conjugates and/or complexes
CC of siRNA; and vectors that express siRNA. The siRNAs are used to modulate
CC expression of the IGF-1R gene in cells, tissue explants or organisms
CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the

treatment of a variety of conditions. They may be used for treating
cancer and other proliferative diseases (e.g., restenosis and polycystic
kidney disease), inflammatory and/or allergic diseases, autoimmune
diseases and transplant rejection. The siRNAs are also useful for drug
screening, diagnosis, therapeutic target identification and validation,
genetic engineering, pharmacogenomics, studying gene function, and gene
mapping (e.g., of single nucleotide polymorphisms). The present sequence
represents the lower strand of a human IGF-1R-targeted double-stranded
siRNA.

Sequence 19 BP; 3 A; 4 C; 8 G; 0 T; 4 U; 0 Other;

Query Match      0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1617 CCACAGGACCTGGCTGCC 1635
DB 19 CCACAGACCTGGCTGCC 1

RESULT 1048
ID ADF84546.
XX ADF84546 standard; RNA; 19 BP.
XX
AC ADF84546;
XX
DT 26-FEB-2004 (first entry)
DE Human ABL1-targeted siRNA - SEQ ID 840.
XX
KW short interfering nucleic acid; siRNA; breakpoint cluster region;
KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KW cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
XX
OS Homo sapiens.
XX
PN WO2003070972-A2.
PD 28-AUG-2003.
PF 20-FEB-2003; 2003WO-US0005234.
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 15-AUG-2002; 2002US-0404039P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 14-JAN-2003; 2003US-0439922P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Chowrira B;
XX
DR WPI; 2003-679889/64.
XX
PT New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint
PT cluster region-Abelson (BCR-ABL) gene.
XX
PS Example 7; SEQ ID NO 840; 197pp; English.
XX
CC The invention relates to a novel double-stranded short interfering
CC nucleic acid (siRNA) that downregulates expression of the breakpoint
CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
CC activity and may be useful for modulating expression of the BCR-ABL gene,
CC as well as for treating leukaemia or lymphoma and in diagnosis, drug
CC screening, target identification and validation, genetic engineering,
CC gene function studies and gene mapping. The current sequence is that of
```

CC the human ABL1-targeted siRNA of the invention.

XX Sequence 19 BP; 2 A; 5 C; 6 G; 0 T; 6 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 63.2%; Pred. No. 1.2e+03;
Matches 12; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY 3688 TTCTGGGGCCAGTCAT 3706

DB 1 UUCUGGGUCCAGUCAU 19

RESULT 1049

ADP84865/c

ID ADP84865 standard; RNA; 19 BP.

XX ADP84865;

XX 26-FEB-2004 (first entry)

DE Human ABL1-targeted siRNA - SEQ ID 1159.

XX short interfering nucleic acid; siRNA; breakpoint cluster region;

KW v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;

KW cytosolic; leukaemia; lymphoma; human; ss; siRNA; ABL1.

XX Homo sapiens.

XX WO2003070972-A2.

XX 28-AUG-2003.

XX 20-FEB-2003; 2003WO-US005234.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 15-AUG-2002; 2002US-0404039P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 14-JAN-2003; 2003US-0439922P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L, Chowrira B;

XX WPI; 2003-679889/64.

XX New double-stranded interfering nucleic acid, useful e.g. for treatment

PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint

PT cluster region-Abelson (BCR-ABL) gene.

XX Example 7; SEQ ID NO 1159; 197pp; English.

XX The invention relates to a novel double-stranded short interfering

CC nucleic acid (siRNA) that downregulates expression of the breakpoint

CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1

CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic

CC activity and may be useful for modulating expression of the BCR-ABL gene,

CC as well as for treating leukaemia or lymphoma and in diagnosis, drug

CC screening, target identification and validation, genetic engineering,

CC gene function studies and gene mapping. The current sequence is that of

CC the human ABL1-targeted siRNA of the invention.

XX Sequence 19 BP; 6 A; 6 C; 5 G; 0 T; 2 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 19;

Best Local Similarity 89.5%; Pred. No. 1.2e+03;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3688 TTCTGGGGCCAGTCAT 3706

DB 19 TTCTGGGGTCCAGTCAT 1

RESULT 1050

ADL79238/c

ID ADL79238 standard; RNA; 19 BP.

XX ADL79238;

XX 20-MAY-2004 (first entry)

DE Human HER2 (EGFR2) siRNA lower strand, SEQ ID NO:403.

XX RNA interference; short interfering nucleic acid; siRNA;

KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;

KW short hairpin RNA; shRNA; expression modulation; gene therapy;

KW drug screening; diagnosis; therapeutic target identification;

KW pharmacogenomics; gene function analysis; gene mapping; cancer;

KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;

KW HER2; EGFR2; neu; erbB2; c-erbB-2; ss.

XX Homo sapiens.

XX WO2003070912-A2.

XX 28-AUG-2003.

XX 20-FEB-2003; 2003WO-US005045.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 29-MAY-2002; 2002WO-US016840.

PR 06-JUN-2002; 2002US-00163552.

PR 06-JUN-2002; 2002US-0386782P.

PR 03-JUL-2002; 2002US-0393924P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 19-SEP-2002; 2002US-00251117.

PR 21-OCT-2002; 2002US-00277494.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;

XX WPI; 2003-697612/66.

XX New short interfering nucleic acid, useful e.g. for treatment and

PT diagnosis of cancer, downregulates expression of the epidermal growth

PT factor receptor gene.

XX Example 3; SEQ ID NO 403; 171pp; English.

XX The invention relates to short interfering nucleic acids (siRNA) which

CC downregulate expression of one or more human epidermal growth factor

CC receptor (EGFR) genes (including HER1, HER2, HER3 and HER4) by RNA

CC interference. The siRNA may or may not comprise ribonucleotides and may

CC be double or single stranded. They further comprise sense and antisense

CC regions, or alternatively are assembled from a sense oligonucleotide and

CC an antisense oligonucleotide. Specifically, the siRNAs include short

CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,

CC can contain deoxyribonucleotides, and can be chemically synthesised,

CC expressed from a vector or enzymatically synthesised. The invention also

CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates

CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are

CC used to modulate expression of EGFR genes in cells, tissue explants or

CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants

CC for the treatment of a variety of conditions. They may be used for

CC treating a wide range of cancers such as breast and ovarian cancer. The

CC siNAs are also useful for drug screening, diagnosis, therapeutic target
 CC identification and validation, genetic engineering, pharmacogenomics,
 CC studying gene function, and gene mapping (e.g., of single nucleotide
 CC polymorphisms). The present sequence represents the lower strand of a
 CC HER2 (EGFR2)-targeted double-stranded siNA.

XX
 SQ Sequence 19 BP; 5 A; 6 C; 4 G; 0 T; 4 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.2e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1672 ATCCGACACTTCGGGCTGG 1690
 Db 19 ATTACAGACTTCGGGCTGG 1

RESULT 1051
 ADL78993
 AC ADL78993 standard; RNA; 19 BP.
 XX
 AC ADL78993;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Human HER2 (EGFR2) transcript target sequence/siNA upper strand, SEQ:158.
 XX
 KW RNA interference; short interfering nucleic acid; siNA;
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;
 KW drug screening; diagnosis; therapeutic target identification;
 KW pharmacogenomics; gene function analysis; gene mapping; cancer;
 KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
 KW HER2; EGFR2; neu; erbB2; c-erbB-2; target sequence; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO2003070912-A2.
 XX
 PD 28-AUG-2003.
 XX
 XX 20-FEB-2003; 2003WO-US005045.
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 29-MAY-2002; 2002WO-US016840.
 PR 06-JUN-2002; 2002US-00163552.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 03-JUL-2002; 2002US-0393924P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 19-SEP-2002; 2002US-0409293P.
 PR 21-OCT-2002; 2002US-00251117.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;
 XX
 XX WPI; 2003-697612/66.
 DR
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of the epidermal growth
 PT factor receptor gene.
 PT
 XX Example 3; SEQ ID NO 158; 171pp; English.
 PS
 XX The invention relates to short interfering nucleic acids (siNA) which
 CC downregulate expression of one or more human epidermal growth factor
 CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA
 CC interference. The siNAs may or may not comprise ribonucleotides and may
 CC be double or single stranded. They further comprise sense and antisense

CC regions, or alternatively are assembled from a sense oligonucleotide and
 CC an antisense oligonucleotide. Specifically, the siNAs include short
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
 CC can contain deoxyribonucleotides, and can be chemically synthesised.
 CC expressed from a vector or enzymatically synthesised. The invention also
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
 CC used to modulate expression of EGFR genes in cells, tissue explants or
 CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
 CC for the treatment of a variety of conditions. They may be used for
 CC treating a wide range of cancers such as breast and ovarian cancer. The
 CC siNAs are also useful for drug screening, diagnosis, therapeutic target
 CC identification and validation, genetic engineering, pharmacogenomics,
 CC studying gene function, and gene mapping (e.g., of single nucleotide
 CC polymorphisms). The present sequence represents the upper strand of a
 CC human HER2 (EGFR2)-targeted double-stranded siNA, which is identical to
 CC the HER2 transcript target sequence.

XX
 SQ Sequence 19 BP; 4 A; 6 C; 6 G; 0 T; 3 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 73.7%; Pred. No. 1.2e+03;
 Matches 14; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 1744 CCCGTGAAGTGGATGCGC 1762
 Db 1 CCCCAUCAAUGGGAUGGCGC 19

RESULT 1052
 ADL79242/c
 ID ADL79242 standard; RNA; 19 BP.
 XX
 AC ADL79242;
 XX
 XX 20-MAY-2004 (first entry)
 XX
 DE Human HER2 (EGFR2) siNA lower strand, SEQ ID NO:407.
 XX
 KW RNA interference; short interfering nucleic acid; siNA;
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;
 KW drug screening; diagnosis; therapeutic target identification;
 KW pharmacogenomics; gene function analysis; gene mapping; cancer;
 KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
 KW HER2; EGFR2; neu; erbB2; c-erbB-2; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO2003070912-A2.
 XX
 PD 28-AUG-2003.
 XX
 XX 20-FEB-2003; 2003WO-US005045.
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 29-MAY-2002; 2002WO-US016840.
 PR 06-JUN-2002; 2002US-00163552.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 03-JUL-2002; 2002US-0393924P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 19-SEP-2002; 2002US-0409293P.
 PR 21-OCT-2002; 2002US-00251117.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 XX
 XX Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;
 XX
 XX PI

DR WPI; 2003-697612/66.
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of the epidermal growth
 PT factor receptor gene.
 XX Example 3; SEQ ID NO 407; 171pp; English.
 PS The invention relates to short interfering nucleic acids (siNA) which
 XX downregulate expression of one or more human epidermal growth factor
 CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA
 CC interference. The siNAs may or may not comprise ribonucleotides and may
 CC be double or single stranded. They further comprise sense and antisense
 CC regions, or alternatively are assembled from a sense oligonucleotide and
 CC an antisense oligonucleotide. Specifically, the siNAs include short
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
 CC can contain deoxyribonucleotides, and can be chemically synthesised,
 CC expressed from a vector or enzymatically synthesised. The invention also
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
 CC used to modulate expression of EGFR genes in cells, tissue explants or
 CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
 CC for the treatment of a variety of conditions. They may be used for
 CC treating a wide range of cancers such as breast and ovarian cancer. The
 CC siNAs are also useful for drug screening, diagnosis, therapeutic target
 CC identification and validation, genetic engineering, pharmacogenomics,
 CC studying gene function, and gene mapping (e.g., of single nucleotide
 CC polymorphisms). The present sequence represents the lower strand of a
 CC HER2 (EGFR2)-targeted double-stranded siNA.
 XX Sequence 19 BP; 3 A; 6 C; 6 G; 0 T; 4 U; 0 Other;
 SQ Query Match 0.4%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.2e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1744 CCGTGAAGTGGATGCGC 1762
 Db 19 CCATCAAGTGGATGCGC 1
 RESULT 1053
 ADL78989
 ID ADL78989 standard; RNA; 19 BP.
 AC ADL78989;
 XX 20-MAY-2004 (first entry)
 DE Human HER2 (EGFR2) transcript target sequence/siNA upper strand, SEQ:154.
 XX RNA interference; short interfering nucleic acid; siNA;
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;
 KW drug screening; diagnosis; therapeutic target identification;
 KW pharmacogenomics; gene function analysis; gene mapping; cancer;
 KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
 KW HER2; EGFR2; neu; erbB2; c-erbB-2; target sequence; ss.
 XX Homo sapiens.
 OS 2003070912-A2.
 PN 28-AUG-2003.
 PD 20-FEB-2003; 2003WO-US0005045.
 PF 20-FEB-2002; 2002US-0358580P.
 XX 11-MAR-2002; 2002US-0363124P.
 PR 29-MAY-2002; 2002WO-US016840.
 PR 06-JUN-2002; 2002US-00163552.
 PR 06-JUN-2002; 2002US-0386782P.

PR 03-JUL-2002; 2002US-0393924P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408379P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 19-SEP-2002; 2002US-00251117.
 PR 21-OCT-2002; 2002US-00277494.
 PR 15-JAN-2003; 2003US-0440129P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA Mcswiggen J, Pavco P, Beigelman L, Foenbaugh K, Jamison S;
 XX WPI; 2003-697612/66.
 DR New short interfering nucleic acid, useful e.g. for treatment and
 XX diagnosis of cancer, downregulates expression of the epidermal growth
 PT factor receptor gene.
 PT Example 3; SEQ ID NO 154; 171pp; English.
 PS The invention relates to short interfering nucleic acids (siNA) which
 XX downregulate expression of one or more human epidermal growth factor
 CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA
 CC interference. The siNAs may or may not comprise ribonucleotides and may
 CC be double or single stranded. They further comprise sense and antisense
 CC regions, or alternatively are assembled from a sense oligonucleotide and
 CC an antisense oligonucleotide. Specifically, the siNAs include short
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
 CC can contain deoxyribonucleotides, and can be chemically synthesised,
 CC expressed from a vector or enzymatically synthesised. The invention also
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
 CC used to modulate expression of EGFR genes in cells, tissue explants or
 CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
 CC for the treatment of a variety of conditions. They may be used for
 CC treating a wide range of cancers such as breast and ovarian cancer. The
 CC siNAs are also useful for drug screening, diagnosis, therapeutic target
 CC identification and validation, genetic engineering, pharmacogenomics,
 CC studying gene function, and gene mapping (e.g., of single nucleotide
 CC polymorphisms). The present sequence represents the upper strand of a
 CC human HER2 (EGFR2)-targeted double-stranded siNA, which is identical to
 CC the HER2 transcript target sequence.
 XX Sequence 19 BP; 4 A; 4 C; 6 G; 0 T; 5 U; 0 Other;
 SQ Query Match 0.4%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 68.4%; Pred. No. 1.2e+03;
 Matches 13; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
 QY 1672 ATGCAGACTTCGGCTGG 1690
 Db 1 AUUACAGACUUGGCGUGG 19
 RESULT 1054
 ADH70233/c
 ID ADH70233 standard; DNA; 19 BP.
 XX ADH70233;
 AC ADH70233;
 XX 25-MAR-2004 (first entry)
 DT Human Vbeta gene repeat sequence #23.
 XX human; T-cell associated disease; Vbeta; autoimmune disease;
 KW degenerative nervous system disease; graft versus host disease;
 KW hypersensitivity disease; infectious disease; neoplastic disease;
 KW Addison's disease; atrophic gastritis;
 KW degenerative nervous system disease; multiple sclerosis;
 KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
 KW allergy; type II hypersensitivity; Goodpasture's syndrome;
 KW type IV hypersensitivity; leprosy; infectious disease; viral infection;

KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
 KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
 KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
 KW breast cancer; ds.
 OS Homo sapiens.
 PN US2002150891-A1.
 XX 17-OCT-2002.
 XX 05-MAR-1999; 99US-00263959.
 XX 19-SEP-1994; 94US-00309335.
 XX 19-SEP-1995; 95US-005311241.
 XX (HOOD/) HOOD L.E.
 XX (ROWE/) ROWEN L.
 PI Hood LE, Rowen L;
 XX WPI; 2004-059052/06.
 XX Kit for diagnosing and treating T-cell associated diseases e.g.
 PT autoimmune, degenerative nervous system and infectious disease, comprises
 PT nucleic acid primers specifically priming and allowing amplification of a
 PT Vbeta gene.
 XX Disclosure; SEQ ID NO 427; 164pp; English.
 XX The invention relates to a kit for diagnosing and treating T-cell
 CC associated diseases which comprises a panel of nucleic acid primers
 CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases
 CC including autoimmune diseases, degenerative nervous system diseases,
 CC graft versus host disease, hypersensitivity diseases, infectious diseases,
 CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
 CC atrophic gastritis. Degenerative nervous system diseases include multiple
 CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
 CC I hypersensitivities such as contact with allergens that lead to
 CC allergies, Type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by
 CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a Vbeta gene repeat sequence.
 XX Sequence 19 BP; 10 A; 0 C; 0 G; 9 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.2e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2834 ATATATATATATATATAT 2852
 DB 19 ATATATATATATATATAT 1
 RESULT 1055
 ADL72177/c
 ID ADL72177 standard; DNA; 19 BP.
 XX AC ADL72177;
 XX 20-MAY-2004 (first entry)
 DT Human FIR DNA amplifying RT-PCR primer.
 DE Solid-cancer antigen; FIR; CENP-A; HOOK2; myomegalin; MKNR1; KIAA1545;
 KW

KW enigma; TROP2; mitosis; CU-EC-1; cytostatic; solid cancer; RT-PCR;
 KW primer; ss.
 XX Homo sapiens.
 OS Synthetic.
 XX WO2004018518-A1.
 PN 04-MAR-2004.
 XX 21-APR-2003; 2003WO-JP005046.
 XX 23-AUG-2002; 2002JP-00244249.
 XX (NISC-) JAPAN SCI & TECHNOLOGY CORP.
 XX Shimada H, Hiwasa T, Tomonaga T, Matsushita K, Nomura F;
 PI Takiguchi M, Ochiai T;
 XX WPI; 2004-248065/23.
 XX Human solid cancer antigen peptides and polynucleotides useful in early
 PT diagnosis and treating solid cancer.
 XX Example 2; SEQ ID NO 23; 136pp; Japanese.
 XX The invention relates to human solid-cancer antigen peptides and encoding
 CC polynucleotides. The antigen peptides are selected from FIR, CENP-A,
 CC HOOK2, myomegalin, MKNR1, KIAA1545, enigma, TROP2, mitosis, CU-EC-1,
 CC Cytostatic. The antigen peptides and their polynucleotides are applicable
 CC in early diagnosis and useful in treating solid cancer. With these 10
 CC antigen peptides and their encoded polynucleotides, early diagnosis of
 CC solid cancer can be achieved accurately and quickly. The present sequence
 CC represents a RT-PCR primer for amplifying the DNA encoding a human solid-
 CC cancer antigen peptide FIR.
 XX Sequence 19 BP; 2 A; 4 C; 11 G; 2 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.2e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1189 CTGACCTCTGGCAAGCCCC 1207
 DB 19 CTGACCTCTGGCCAGCCCC 1
 RESULT 1056
 ADL71963/c
 ID ADL71963 standard; DNA; 19 BP.
 XX AC ADL71963;
 XX 20-MAY-2004 (first entry)
 DT Human FIR DNA amplifying PCR primer, SEQ ID 8.
 DE FIR; CENP-A; cancer antigen peptide;
 KW far-upstream binding protein interacting receptor;
 KW centromere-specific protein A; cancer; human; PCR; primer; ss.
 XX Homo sapiens.
 OS Synthetic.
 XX WO2004018679-A1.
 PN 04-MAR-2004.
 XX 22-AUG-2003; 2003WO-JP010676.
 XX 23-AUG-2002; 2002JP-00244249.
 XX (NISC-) JAPAN SCI & TECHNOLOGY CORP.
 PA

XX Shimada H, Tomonaga T, Matsushita K, Ochiai T, Nomura F;
PI WPI; 2004-238979/22.
XX
XX Cancer antigen polypeptides, nucleic acids encoding them and antibodies
PT recognising them for specific and sensitive diagnosis of colon and rectal
PT cancer.
XX
XX Example 2; SEQ ID NO 8; 323pp; Japanese.
XX
XX The invention relates to novel polynucleotides encoding all or part of
CC cancer antigen peptide FIR (far-upstream binding protein interacting
CC receptor) or peptides derived from it and polynucleotides encoding all or
CC part of cancer antigen peptide CENP-A (centromere-specific protein A) or
CC a peptide derived from it. The polynucleotides or primers, probes and
CC substances containing them are use in a method for cancer diagnosis and
CC especially diagnosis of colorectal cancer. The present sequence
CC represents a PCR primer for amplifying the human FIR DNA.
XX
SQ Sequence 19 BP; 2 A; 4 C; 11 G; 2 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1189 CTGACCTGGGCAAGCCCC 1207
|||||||
Db 19 CTGACCTGGGCAAGCCCC 1
RESULT 1057
ADQ61018
ID ADQ61018 standard; RNA; 19 BP.
XX
AC ADQ61018;
XX
DT 09-SEP-2004 (first entry)
XX
DE Anti-FGFR2 siRNA related DNA sequence SEQ ID NO:720.
XX
XX ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference.
XX
OS Synthetic.
XX
PN WO2004045543-A2.
XX
PD 03-JUN-2004.
XX
PF 14-NOV-2003; 2003WO-US036787.
XX
PR 14-NOV-2002; 2002US-0426137P.
PR 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMAON INC.
XX
XX Anastasia K, Angela R, Devin L, William M, Stephen S;
PI WPI; 2004-420527/39.
XX
XX Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
XX Example 12; SEQ ID NO 720; 199pp; English.
XX
XX The invention relates to a novel method for selecting siRNA (short
CC interfering RNA) comprising selecting an siRNA molecule of 19-25
CC nucleoside bases by selecting a target gene and measuring the
CC functionality of sequences of 19-25 nucleotides in length that are
CC substantially complementary to a stretch of nucleotides of the target

CC sequence, where the functionality is dependent upon non-target specific
CC criteria. Also claimed are methods for gene-silencing, developing an
CC siRNA algorithm for selecting siRNA, selecting an siRNA with improved
CC functionality, selecting hyperfunctional siRNA, an siRNA molecule
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
CC sequence consisting of GGGAGUAGUGAUGAUGA; GAAAGACUCCAUUAUAG;
CC GUACACACGGGAGAU; AGAUGUGAUGAUGAUGA; UGAAGACUCUGUCAGUUU;
CC CAUGCGCCUCUGUUGA; UGCGCCUCUGUUGAUU; GAGAUGUGAUGAUGAUGA;
CC GGAGUAGUGAUGAUGA; and GAAGACUCUGUCAGUUU. The siRNA molecule
CC comprises a sense strand and an anti-sense strand. The siRNA molecule
CC comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention. The sequence is shown in
XX the specification as DNA, but described as siRNA.
SQ Sequence 19 BP; 7 A; 0 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1294 GTGAAGATGCTGAAGACG 1312
|||||||
Db 1 GTGAAGATGCTGAAGATG 19
RESULT 1058
AAQ97929
ID AAQ97929 standard; DNA; 20 BP.
XX
AC AAQ97929;
XX
DT 25-MAR-2003 (revised)
DT 18-OCT-1995 (first entry)
XX
DE PNA oligomer targeting coding region of PKC-zeta.
XX
KW Peptide nucleic acid; PNA; PKC-alpha; protein kinase C; ss;
KW cell proliferation; cell differentiation; isozyme; antisense;
KW triple helix; cancer; psoriasis; inflammation.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..20
FT /note= "at least one (and preferably all) of the backbone
FT subunits are composed of N-acetyl N-(2-aminoethyl)glycine
FT peptide residues, the nucleobase being attached
FT covalently to the acetyl group and the peptide linkage
FT being formed by condensation of the glycine carboxy group
FT of one residue with the amino group of the 2-aminoethyl
FT moiety in the next residue"
XX
PN WO9503833-A1.
XX
PD 09-FEB-1995.
XX
XX 28-JUL-1994; 94WO-US008465.
XX
PR 29-JUL-1993; 93US-00099098.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dean NM;
XX
DR WPI; 1995-082040/11.
XX
XX New peptide nucleic acid oligomers specific for protein kinase C
PT isozyme (s) - useful as anti-sense molecules for treating PKC mediated

PT disease, e.g. cancer, psoriasis and inflammation.

XX Claim 31; Page 270; 287pp; English.

PS New peptide nucleic acid (PNA) oligomers are provided which (a) consist of naturally occurring nucleobases covalently bound to a polyamide backbone and (b) hybridize to the translation initiation AUG region, CC coding region, 5' untranslated region (5' UTR) or 3' untranslated region (3' UTR) of PKC-alpha or its isoforms. The PNAs can be used to target RNA CC and single stranded DNA (ssDNA) to produce antisense-type gene regulation CC moieties. They inhibit expression of PKC-alpha and its isoforms CC (including beta, gamma, delta, epsilon, zeta and eta) and so are useful CC for treating and diagnosing cell proliferation and differentiation CC processes such as neoplastic, hyperproliferative and inflammatory CC diseases. PNA oligomers have high affinity for complementary single CC stranded DNA. They are also able to form triple helices in which a first CC PNA strand binds with RNA or ssDNA and a second PNA strand binds with the CC resulting double helix or with the first PNA strand. The PNAs possess no CC significant charge and are water soluble, which facilitates cellular CC uptake. Further, since they contain amides of non-biological amino acids, CC they are biostable and resistant to enzymatic degradation by proteases. CC The present sequence targets the coding region of PKC-zeta. (Updated on CC 25-MAR-2003 to correct PN field.)

XX SQ Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 323 CTCCTCCATCTCTGGCT 341
DB 2 CTCCTCCATCTCTGGCT 20

RESULT 1059
AAQ84246
ID AAQ84246 standard; DNA; 20 BP.
XX AAQ84246;
XX 25-MAR-2003 (revised)
DT 21-SEP-1995 (first entry)
XX PKC-zeta coding region antisense oligo, ISIS #9010.
XX Antisense; protein kinase C; alpha; PKC; beta; gamma; eta; epsilon; zeta;
KW modulation; expression; isozyme; hybridise; 5' UTR; human;
KW 3' untranslated region; translation initiation site; detection;
KW phosphorothioate linkage; 2'-O-methyl modification;
KW 2'-O-propyl modification; ss.
XX Synthetic.
XX WO9502069-A1.
PN 19-JAN-1995.
XX 08-JUL-1994; 94WO-US007770.
PF 09-JUL-1993; 93US-00089996.
PR 22-FEB-1994; 94US-00199799.
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Boggs RT, Dean NM;
PI WPI; 1995-066911/09.
DR Oligo:nucleotide(s) hybridisable with Protein Kinase C mRNA or gene -
XX also novel PKC-alpha 3'-UTR sequence, useful for diagnosis and treatment
PT of hyperproliferative disorders.
XX

PS Example 15; Page 36; 125pp; English.

XX The sequences given in AAQ84244-51 are oligos which are antisense to the CC protein kinase C-zeta (PKC-zeta) cDNA. These antisense molecules may be CC used in modulating the expression of this particular isozyme of PKC. CC These oligomers have a inhibition of PKC of <70%. The oligos of the CC invention preferably hybridise with the 5' or 3' untranslated regions of CC the PKC gene, or the translation initiation site, or the coding region. CC These oligos may be used in the detection of the human PKC genes and for CC treatment of animals with conditions associated with PKC, esp. CC hyperproliferative diseases such as psoriasis, colorectal cancer, lung CC cancer, breast or skin cancer. These oligos may contain at least one CC phosphorothioate linkage and/or at least one of the nucleotides comprises CC a modification on the 2' position of the sugar, esp. a 2'-O-methyl or a CC 2'-O-propyl modification. (Updated on 25-MAR-2003 to correct PN field.)

XX SQ Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 323 CTCCTCCATCTCTGGCT 341
DB 2 CTCCTCCATCTCTGGCT 20

RESULT 1060
AAQ30427/c
ID AAQ30427 standard; DNA; 20 BP.
XX AAQ30427;
XX 28-JAN-1997 (first entry)
XX Compound simple sequence repeat primer (CA)4.5(TA)7.5.
XX Detection; polymorphism; perfect compound simple sequence repeat;
KW adaptor directed primer; genome; genetic; fingerprinting;
KW amplified fragment length polymorphism assay; microsatellite region;
KW genetic trait marking; germplasm comparisons; compound; ss.
XX Synthetic.
XX WO9617082-A2.
PN 06-JUN-1996.
XX 21-NOV-1995; 95WO-US015150.,
XX 28-NOV-1994; 94US-00346456.
XX (DUPO) DU PONT DE NEMOURS & CO E I.
XX Morgante M, Vogel JM;
PI WPI; 1996-277795/28.
XX Modified amplified fragment length polymorphism assay - for detection of
PT polymorphism esp. in micro:satellite regions.
XX Disclosure; Fig 1c; 173pp; English.
XX Detecting polymorphisms between 2 nucleic acid samples, esp. in
CC microsatellite regions, comprises digesting the nucleic acid to generate
CC fragments, ligating adaptor segments to their ends, amplifying them using
CC primer directed amplification and comparing the prods. to detect
CC differences. The primers used in the amplification comprise a primer
CC consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
CC directed primer, comprising a sequence complementary to an adaptor
CC segment. The present sequence is an example of a compound SSR primer. The
CC method represents a modified amplified fragment length polymorphism
CC assay, which is partic. useful for genome fingerprinting, i.e. for

```
CC genetic trait marking and germplasm comparisons
XX
SQ Sequence 20 BP; 10 A; 7 C; 0 G; 3 T; 0 U; 0 Other;

Query Match          0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2338 TGTGTGTGTGTGTGCACAT 2356
Db 20 TGTGTGTGTGTGTATAT 2

RESULT 1061
AAK99571
ID AAK99571 standard; DNA; 20 BP.
XX
AC AAK99571;
XX
DT 06-AUG-2002 (first entry)
XX
DE Fusion region of PHGH56 and PHGH57 growth hormone protein plasmids.
XX
KW Serum albumin-growth hormone fusion protein; growth hormone;
KW Down's syndrome; chimeric; ds.
XX
OS Unidentified.
OS Chimeric.
XX
PN KR99076789-A.
XX
PD 15-OCT-1999.
XX
PF 25-JUN-1998; 98KR-00704914.
XX
PR 30-DEC-1995; 95GB-00026733.
PR 19-DEC-1996; 96WO-GB003164.
XX
PA (DELZ ) DELTA BIOTECHNOLOGY LTD.
XX
PI Ballance DJ;
XX
DR WPI; 1997-363680/33.
XX
PT Serum albumin-growth hormone fusion protein - useful to treat growth
PT hormone related diseases, e.g. Down's syndrome.
XX
PS Disclosure; Fig 11; 21pp; Korean.
XX
CC The invention relates to a serum albumin-growth hormone fusion protein -
CC useful to treat growth hormone related diseases such as Down's syndrome.
CC This polynucleotide sequence represents the DNA of a fusion region of the
CC PHGH56 and PHGH57 growth hormone protein plasmids of the invention
XX
SQ Sequence 20 BP; 0 A; 0 C; 16 G; 0 T; 0 U; 4 Other;

Query Match          0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 73.7%; Pred. No. 1.3e+03;
Matches 14; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 2920 GGGCGGGCGGTGGGGGGCG 2938
Db 2 GGGSGGGSGGGGGGGGGS 20

RESULT 1062
AAV48702
ID AAV48702 standard; DNA; 20 BP.
XX
AC AAV48702;
XX
XX
XX 15-OCT-1998 (first entry)
XX
```

```
DE junB gene antisense oligonucleotide JunB-T-11.
XX
XX junB; junD; antisense oligonucleotide; modulate; gene expression; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
PN EP856579-A1.
XX
XX 05-AUG-1998.
XX
PF 31-JAN-1997; 97EP-00101531.
XX
PR 31-JAN-1997; 97EP-00101531.
XX
PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
XX
PI Schlingensiepen K, Brysch W;
XX
DR WPI; 1998-400910/35.
XX
PT Preparation of antisense oligo:nucleotide(s) which lack long runs of
PT consecutive guanosine or inosine - and have specific ratio of residues
PT able to form two or three hydrogen bonds, have greater activity and
PT reduced toxicity, used therapeutically or to modulate growth of cells in
PT culture.
XX
PS Example 3; Fig 5c; 286pp; English.
XX
CC AAV48564-708 represent antisense oligonucleotides directed against the
CC junB and junD genes. Of these, only oligonucleotides AAV48565-614
CC resulted in effective downregulation of negative growth control by JunB
CC or JunD, while AAV48615-708 had little effect. The oligonucleotides
CC exemplify the invention. The specification describes oligonucleotides
CC that contain 8-30 nucleotides, which contain at most 8 nucleotides that
CC can each form three hydrogen bonds to cytosine; do not contain four
CC consecutive nucleotides able to form three H-bonds each to four
CC nucleotides each able to form three H-bonds to three consecutive
CC cytosines, and the ratio between residues able to form two H-bonds each
CC (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
CC oligonucleotides are used to modulate expression of genes, particularly
CC the genes for p53, ErbB-2, junB, junD, TGF-beta 1 or beta 2 to control
CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or
CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
CC oligonucleotides can also be used to analyse function of proteins (by
CC altering their expression or activity) and therapeutically, e.g. in cases
CC of cancer or (targeting TGF) for stimulating the immune system
XX
SQ Sequence 20 BP; 0 A; 8 C; 12 G; 0 T; 0 U; 0 Other;

Query Match          0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1478 GGGCGCGCGCGCGCGCGG 1496
Db 1 GGGCGCGCGCGCGCGCGG 19

RESULT 1063
AAV73071/c
ID AAV73071 standard; DNA; 20 BP.
XX
AC AAV73071;
XX
XX
XX 09-FEB-1999 (first entry)
XX
DE Human ras oncogene probe #46.
XX
KW Ras oncogene; probe; point mutation; detection; cancer; ss.
XX
OS Synthetic.
```


CC invention describes genetic variations involved in diseases associated
 CC with TNF-alpha which are screened for by detecting the presence or
 CC absence of one or more of the following mutations in the 5'-flanking
 CC region of the human TNF-alpha gene: (1) T in place of C at position -857;
 CC (2) A instead of C at -863; and (3) C instead of T at -1031 (positions
 CC 373, 367 and 199 respectively of the sequence given in AAX18584). The
 CC mutations increase TNF-alpha production in the cells involved. A suitable
 CC method for detection of these mutations is allele-specific
 CC oligonucleotide hybridisation (ASOH). TNF-alpha genetic variations
 CC associated with TNF-alpha-implicated diseases such as juvenile rheumatoid
 CC arthritis, chronic rheumatoid arthritis, insulin-dependent diabetes or
 CC insulin-independent diabetes

XX Sequence 20 BP; 0 A; 2 C; 9 G; 9 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. NO. 1.3e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2333 GCCTGTGTGTGTGTGTG 2351
 |||||
 Db 1 GCTGTGTGTGTGTGTG 19

RESULT 1066
 AAX36874
 ID AAX36874 standard; DNA; 20 BP.
 XX
 AC AAX36874;
 XX

DT 14-JUL-1999 (first entry)

DE Human XLIS gene fragment PCR primer F3-3.

XX XLIS gene; human; detection; diagnosis; prenatal diagnosis; therapy;
 KW lissencephaly; LIS; agyria-pachygyria; subcortical laminar heterotopia;
 KW SCHL; cortical dysgenesis; cryptogenic epilepsy; neurological disorder;
 KW neurodegenerative disease; Alzheimer's disease; X-linked disorder;
 KW genetic counselling; PCR primer; ss.

XX Synthetic.
 OS Homo sapiens.

XX EP918091-A1.

XX 26-MAY-1999.

XX 21-NOV-1997; 97EP-00402811.

XX 21-NOV-1997; 97EP-00402811.

XX (INRM) INSERM INST NAT SANTE & RECH MEDICALE.

XX Chelly J, Kahn A, Des Portes V, Pinard J;

XX WPI; 1999-290318/25.

XX New gene and its gene product expressed in the brain, useful for
 FT diagnosing and treating disorders such as lissencephaly and subcortical
 PT laminar heterotopia.

XX Claim 9; Page 45; 71pp; English.

XX This sequence is a primer for the human XLIS gene of the invention. The
 CC XLIS fragments may be used to detect abnormalities in the expression of
 CC the XLIS gene transcripts or to compare their sequence with that of the
 CC XLIS transcripts from patients for in vitro especially prenatal diagnosis
 CC of lissencephaly (LIS) (or agyria-pachygyria), subcortical laminar
 CC heterotopia (SCHL), cortical dysgenesis, cryptogenic epilepsies or
 CC neurodegenerative diseases such as Alzheimer's disease. These disorders
 CC mainly affect females as the XLIS gene is X-linked. The XLIS fragments
 CC may also be used to administer to patients to prevent or treat the above
 CC disorders and may be used as a tool in genetic counselling.

CC Oligonucleotides which bind to the fragments may be used to amplify the
 CC XLIS gene from a sample for comparison to normal samples in the in vitro
 CC diagnosis regime. This may also be performed by amplifying XLIS cDNA from
 CC the mRNA in the sample. Antibodies to XLIS may be used to detect XLIS in
 CC a biological sample or can be administered to patients to prevent or
 CC treat the above disorders. They may also be used to purify XLIS from a
 CC biological sample. XLIS may also be administered to patients to prevent
 CC or treat the above neurological disorders. In addition XLIS may be used
 CC as a marker of above neuronal cells at an early stage of development; its
 CC discovery increases understanding of both the neuronal movement which
 CC leads to development of the cortical region of the brain and of the
 CC pathogenesis of the group of neuronal disorders mentioned above

XX Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. NO. 1.3e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2973 GCAGAGGACGAGGCTTT 2991
 |||||
 Db 1 GCATAGGACGAGGCTTT 19

RESULT 1067
 AAA11330
 ID AAA11330 standard; DNA; 20 BP.
 XX
 AC AAA11330;
 XX

DT 08-NOV-2000 (first entry)

DE Human TRPC7 gene intron 23/exon 24 junction.

XX Transmembrane protein; TRPC7; brain; transient receptor potential; TRP;
 KW calcium channel function; human; gene therapy; periodic psychosis;
 KW mutation; ss.

XX Homo sapiens.

XX Key Location/Qualifiers
 FT intron 1..10
 FT /tag= a
 FT /number= 23

FT exon 11..20

FT /tag= b

FT /number= 24

XX WO200029571-A1.

XX 25-MAY-2000.

XX 11-NOV-1999; 99WO-JP006289.

XX 12-NOV-1998; 98JP-00321200.

XX (BIKE) EIKEN KAGAKU KK.

XX Shimizu N, Nagamine K;

XX WPI; 2000-387784/33.

XX Nucleic acids encoding transmembrane protein TRPC7 expressed in brain and
 FT homologous to transient receptor potential protein useful in the of
 PT treatment of associated diseases such as periodic psychosis.

XX Example 7; Page 39; 77pp; Japanese.

XX The invention relates to the isolation of a nucleic acid (AAA11284)
 CC coding for a transmembrane protein TRPC7 (AAY92944) which is expressed in
 CC brain and is homologous to transient receptor potential (TRP) protein.
 CC This suggests that the TRPC7 protein may have a calcium channel function.
 CC The genomic sequence has been shown to contain 31 introns. This sequence

CC represents an exon/intron junction from the genomic TRPC7 sequence. The
CC DNA and protein can be used in the diagnosis and treatment of disorders
CC associated with TRPC7, especially the screening, monitoring and treatment
CC (by gene therapy) of periodic psychosis, which appears to be associated
CC with mutations in the TRPC7 gene

XX
SQ Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1566 TGCTACCGTGGCCGG 1584

DB 1 TGGCTTCCAGGTGCCCG 19

RESULT 1068

AAA79923/C

ID AAA79923 standard; DNA; 20 BP.

XX AC AAA79923;

XX AC AAA79923;

XX 20-NOV-2000 (first entry)

XX Hepatitis B virus related oligonucleotide probe #186.

XX Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection;

XX mutation; high-density gene chip; ss.

XX Hepatitis B virus.

OS CN1252452-A.

PN 10-MAY-2000.

XX 24-SEP-1999; 99CN-00114460.

XX 24-SEP-1999; 99CN-00114460.

XX (UYDO-) UNIV DONGNAN.

XX Sun X, Lu Z, Wang Y;

XX WPI; 2000-443233/39.

XX High-density gene chip making process.

XX Example 1; Fig 15; 19pp; Chinese.

CC The present invention describes a method which comprises making a high-
CC density gene chip, specifically for making high-density micro-array of
CC oligonucleotide probes. An oligonucleotide probe selecting process to
CC seek preferentially length variable and coverage variable probes is
CC provided to ensure identical cross melting temperature of probes to the
CC maximum limit, and this can make the cross control of gene chip
CC relatively simple and raise the reliability of the gene chip detecting
CC results. The process proposes a specific probe selection method for
CC detecting target sequence directly, detecting mutation in both specific
CC and non-specific sites and a probe overall arrangement scheme. AAA79738
CC to AAA80201 represent oligonucleotide probe sequences which are used in
CC examples from the present invention

XX
SQ Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1877 AGGAGCTCTTCAAGCTGCT 1895

DB 19 AGGAGCTCTTCAAGCTGCT 1

RESULT 1069

AAZ98499/C

ID AAZ98499 standard; DNA; 20 BP.

XX AC AAZ98499;

XX 19-JUN-2000 (first entry)

XX H. discus derived sequence #17.

XX Satellite sequence; DNA fragmentation; microsatellite DNA; DNA marker;

XX Haliotis discus; ss.

XX Haliotis discus.

XX WO200011156-A1.

XX 02-MAR-2000.

XX 01-JUL-1999; 99WO-JF003551.

XX 18-AUG-1998; 98JP-00232153.

XX (NORQ) JAPAN MIN AGRIC FORESTRY & FISHERIES.

XX Takahashi H, Sekino M;

XX WPI; 2000-224692/19.

XX Isolation of satellite sequences from genomic DNA for use as DNA markers
XX comprises isolating a library with high homogeneity by DNA fragmentation.
XX Example 5; Page 14; 35pp; Japanese.

XX The invention provides a novel method for isolation of satellite
XX sequences from genomic DNA that comprises fragmentation of the DNA by a
XX method which is not dependent on base sequences, then selection of the
XX satellite sequences from the obtained genomic library of high
XX homogeneity. The method is useful for the isolation of microsatellite DNA
XX sequences which can be used as DNA markers. The new method markedly
XX improves the efficiency of isolation of satellite sequences in comparison
XX to prior art methods which are reliant on base sequences. Sequences
XX AAZ98483-514 represent sequences from Haliotis discus, used in the method
XX of the invention

XX Sequence 20 BP; 6 A; 10 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2329 GTGTGGGTGTGTGTGTGTG 2347

DB 19 GCGCGGTGTGTGTGTGTG 1

RESULT 1070

AAC60532

ID AAC60532 standard; DNA; 20 BP.

XX AC AAC60532;

XX 31-JAN-2001 (first entry)

XX Human fra-1 mRNA antisense oligonucleotide ISIS 109023.

XX Human; fra-1; antisense oligonucleotide; phosphorothioate; cytosstatic;

XX antiinflammatory; 2'-methoxyethyl wing; 2'-MOE wing; infection; cancer;

XX ss.

XX Homo sapiens.

XX Synthetic.

XX PN US6124133-A.
 XX PD 26-SEP-2000.
 XX PF 15-OCT-1999; 99US-00418641.
 XX PR 15-OCT-1999; 99US-00418641.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI Taylor JK, Cowsert LM;
 XX XX WPI; 2000-601552/57.
 XX PT Novel antisense compound 8-30 nucleobases in length targeted to human fra
 PT -1 and which specifically hybridizes with and inhibits the expression of
 PT human fra-1, useful for modulating the expression of fra-1 in cells.
 XX PS Claim 3; Col 41; 38pp; English.
 XX CC The present sequence is one of a large number of antisense
 CC oligonucleotides which are targeted to nucleic acids encoding fra-1. The
 CC sequences may be oligodeoxyribonucleotides or chimeric oligonucleotides
 CC containing a central gap region consisting of ten 2'-deoxynucleotides,
 CC which is flanked on both sides by 2'-methoxyethyl (2'-MOE) wings. The
 CC oligonucleotides have a phosphorothioate backbone and the cytidine
 CC residues in the 2'-MOE wings are 5-methylcytidines. The fra-1 antisense
 CC oligonucleotides are useful for inhibiting the expression of fra-1 in
 CC human cells or tissues. They can be used for diagnostics, therapeutics,
 CC prophylaxis and as research reagents and in kits. Use of the antisense
 CC compounds may also be useful prophylactically, e.g. to prevent or delay
 CC infection, inflammation or tumour formation
 XX SQ Sequence 20 BP; 3 A; 8 C; 9 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 1.3e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1484 GCGGCCCCCGGCGCTGGA 1502
 DB 2 GCGGCCCCCGGCGCGCGA 20
 RESULT 1071
 AAC79540/c
 ID AAC79540 standard; DNA; 20 BP.
 XX AC AAC79540;
 XX DT 07-FEB-2001 (first entry)
 XX DE Murine p38beta antisense oligonucleotide SEQ ID 65.
 XX KW Antisense oligonucleotide; p38 mitogen activated protein kinase; MAPK;
 KW antithematic; antiarthritic; immunosuppressive; cardiant; heart disease;
 KW antiinflammatory; autoimmune disease; rheumatoid arthritis; apoptosis;
 KW phosphorothioate; ss.
 XX OS Mus sp.
 XX PN WO200059919-A1.
 XX PD 12-OCT-2000.
 XX PF 04-APR-2000; 2000WO-US008794.
 XX PR 06-APR-1999; 99US-00286904.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI Monia BP, Gaarde WA, Nero PS, McKay R, Popoff I;

XX WPI; 2000-664982/64.
 XX Antisense compound targeted to p38 mitogen activated protein kinase
 PT inhibits protein kinase and is useful for diagnosing and treating
 PT inflammatory, autoimmune and heart disease.
 XX Example 5; Page 53; 90pp; English.
 XX CC This invention relates to antisense compounds 8-30 nucleobases in length
 CC targeted to the 5'-untranslated region, translational start site,
 CC translational termination region or 3'-untranslated region of a nucleic
 CC acid encoding a p38 mitogen activated protein kinase (MAPK), where the
 CC antisense oligonucleotides inhibit the expression of MAPK. Sequences
 CC AAC79480 and AAC79501 represent human p38alpha MAPK and p38beta MAPK cDNA
 CC sequences. AAC79481 - AAC79500 and AAC79553 - AAC79570 represent human
 CC p38alpha antisense oligonucleotides, while AAC79502 - AAC79521 and
 CC AAC79571 - AAC79580 represent human p38beta antisense oligonucleotides.
 CC Also included in the invention are a p38alpha cDNA sequence AAC79523 and
 CC antisense oligonucleotides AAC79523 - AAC79536 isolated from rat tissue.
 CC Murine p38beta MAPK cDNA is represented in AAC79537 and antisense
 CC oligonucleotides targeting the sequence are given in AAC79538 - AAC79552.
 CC The antisense oligonucleotides have antirheumatic; antiarthritic;
 CC immunosuppressive; cardiant and antiinflammatory activity. The antisense
 CC oligonucleotides are useful for inhibiting the expression of p38 MAPK in
 CC cells or tissues. The oligonucleotides are used for treating an animal
 CC with diseases such as inflammatory or autoimmune diseases e.g. rheumatoid
 CC arthritis, or heart disease. The oligonucleotides are also useful for
 CC inhibiting inflammation or apoptosis
 XX SQ Sequence 20 BP; 2 A; 10 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 1.3e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 43 GGGCCCCCAGCGCTGCAGG 61
 DB 20 GTGCCGCGAGCGCTGCAGG 2
 RESULT 1072
 AAH78639
 ID AAH78639 standard; DNA; 20 BP.
 XX AC AAH78639;
 XX DT 10-DEC-2001 (first entry)
 XX DE PCR primer for mechanically sensitive potassium channel gene fragment.
 XX DE Human; mechanically sensitive potassium channel; riluzole; TWICK;
 KW polyunsaturated fatty acid; arachidonic acid; nTRAK; chromosome 11q13;
 KW neuronal excitation; muscle excitation; cardiac rhythm; anoxia;
 KW hormone secretion; cardiac disease; vascular disease; ischemia;
 KW nervous system disorder; endocrinal disease; muscle disease;
 KW retinal disease; epilepsy; cardiac arrhythmia; neurodegeneration;
 KW PCR primer; ss.
 XX OS Homo sapiens.
 XX PN WO200168670-A2.
 XX PD 20-SEP-2001.
 XX PF 14-MAR-2001; 2001WO-FR000758.
 XX PR 14-MAR-2000; 2000FR-00003264.
 XX PA (CNRS) CNRS CENT NAT RECH SCI.
 XX PI Lazdunski M, Lesage F, Maingret F;

```
DR WPI; 2001-590037/66.
XX
PT New mechanically sensitive potassium channel, useful for treating
PT cardiovascular diseases and in drug screening, is activated by
PT polyunsaturated fatty acids.
XX
XX Disclosure; Page 15; 37pp; French.
XX
CC PCR primers AAH78639-40 were used to amplify a gene fragment of the human
CC mechanically sensitive potassium channel gene. The channel is activated
CC by polyunsaturated fatty acids (particularly arachidonic acid (AA)) and
CC by riluzole. The polypeptide is designated human TWICK-related AA-
CC activated potassium channel (hTRAACK). The hTRAACK gene is located on
CC chromosome 1q13. hTRAACK is involved in regulation of neuronal and muscle
CC excitation, cardiac rhythm and secretion of hormones. Cells that express
CC hTRAACK, designated to screen for modulators of hTRAACK activity. Such
CC modulators are potentially useful for prevention or treatment, in humans
CC and animals, of: cardiac and/or vascular disease; nervous system
CC disorders associated with ischemia and anoxia; endocrinal diseases
CC associated with anomalous hormone secretion or muscle diseases; and
CC retinal diseases. Typical examples are epilepsy, cardiac arrhythmia and
CC neurodegeneration
XX
XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1869 CCTGTGGAGGAGCTCTTC 1887
Db ||||| ||||| ||||| |||||
2 CCCAGTGGAGGAGCCCTTC 20
RESULT 1073
AAD15530
ID AAD15530 standard; DNA; 20 BP.
XX
AC AAD15530;
XX
XX 15-NOV-2001 (first entry)
XX
DE Human C-Raf protein target DNA #1.
XX
XX Human; C-Raf protein; genetic disease; antisense target; therapeutic; ss.
XX
XX Homo sapiens.
XX
XX WO200161030-A2.
XX
XX 23-AUG-2001.
XX
XX 14-FEB-2001; 2001WO-US004732.
XX
XX 14-FEB-2000; 2000US-00504653.
XX
XX (BOLL/) BOLLON A P.
XX
XX (GRAY/) GRAY D M.
XX
XX (JUSE/) JU-SEOG L.
XX
XX Bollon AP, Gray DM, Ju-Seog L;
XX
XX WPI; 2001-529916/58.
XX
XX Selecting optimal subsequence antisense targets for inhibition of mRNA
XX expression of target mRNA for the therapeutic treatment of genetic
XX disease.
XX
XX Example 2; Page 17; 87pp; English.
XX
XX The invention relates to a method for selecting optimal subsequence
XX antisense targets. The method involves preparing an antisense
XX oligonucleotide capable of inhibiting mRNA expression of target mRNA
XX
XX Selecting optimal subsequence antisense targets for inhibition of mRNA
XX expression of target mRNA for the therapeutic treatment of genetic
XX disease.
XX
XX Example 2; Page 17; 87pp; English.
XX
XX The invention relates to a method for selecting optimal subsequence
XX antisense targets. The method involves preparing an antisense
XX oligonucleotide capable of inhibiting mRNA expression of target mRNA
CC
CC sequences, as well as antisense oligonucleotides capable of binding DNA.
CC The antisense and antigen libraries are useful for preparing therapeutic
CC agents for the treatment of genetic disease. The present DNA sequence is
CC human C-Raf protein target DNA related to the invention. Note: The
CC present sequence is shown as DNA in the specification; however, in vivo,
CC this target sequence would be mRNA
XX
XX Sequence 20 BP; 4 A; 3 C; 12 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 843 GGTGCCAGCGGAGGAGGAG 861
Db ||||| ||||| ||||| |||||
2 GCTGCCAGGAGGAGGAGGAG 20
RESULT 1074
AAD15540/c
ID AAD15540 standard; DNA; 20 BP.
XX
AC AAD15540;
XX
XX 15-NOV-2001 (first entry)
XX
DE Human C-Raf gene targetted antisense oligonucleotide #1.
XX
XX Human; C-Raf protein; genetic disease; therapeutic; antisense;
XX phosphorothioate backbone; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone"
XX
XX WO200161030-A2.
XX
XX 23-AUG-2001.
XX
XX 14-FEB-2001; 2001WO-US004732.
XX
XX 14-FEB-2000; 2000US-00504653.
XX
XX (BOLL/) BOLLON A P.
XX
XX (GRAY/) GRAY D M.
XX
XX (JUSE/) JU-SEOG L.
XX
XX Bollon AP, Gray DM, Ju-Seog L;
XX
XX WPI; 2001-529916/58.
XX
XX Selecting optimal subsequence antisense targets for inhibition of mRNA
XX expression of target mRNA for the therapeutic treatment of genetic
XX disease.
XX
XX Example 2; Page 19; 87pp; English.
XX
XX The invention relates to a method for selecting optimal subsequence
XX antisense targets. The method involves preparing an antisense
XX oligonucleotide capable of inhibiting mRNA expression of target mRNA
XX sequences, as well as antisense oligonucleotides capable of binding DNA.
XX The antisense and antigen libraries are useful for preparing therapeutic
XX agents for the treatment of genetic disease. The present DNA sequence is
XX phosphorothioate antisense oligonucleotide which is targetted to human C-
XX Raf gene
XX
XX Sequence 20 BP; 1 A; 12 C; 3 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.8; DB 1; Length 20;
```

Best Local Similarity 89.5%; Pred. No. 1.3e+03; Mismatches 2; Indels 0; Gaps 0;

Matches 17; Conservative 0;

QY 843 GCTGCCAGCCGAGGAGGAG 861

Db 19 GCTGCCAGGAGGAGGAG 1

RESULT 1075

AAF69324

ID AAF69324 standard; DNA; 20 BP.

XX AC AAF69324;

XX 18-APR-2001 (first entry)

XX Integrin-linked kinase coding region targeted oligonucleotide #37.

XX Antisense; integrin-linked kinase; hIK; infection; tumour; inflammation;

XX SS.

XX Homo sapiens.

XX US6177273-B1.

XX 23-JAN-2001.

XX 26-OCT-1999; 99US-00428219.

XX 26-OCT-1999; 99US-00428219.

XX (ISIS-) ISIS PHARM INC.

XX Bennett CF, Cowser LM;

XX WPI; 2001-137069/14.

XX Novel antisense compounds capable of modulating expression of human

XX Integrin-linked kinase, useful for diagnosis, prophylaxis and treatment

XX of diseases, e.g. tumors, associated with expression of the kinase.

XX Claim 3; Col 43; 40pp; English.

XX The present invention relates to an antisense compound 8 to 30 bases in

XX length targeted to the 5' untranslated (UTR) region, the coding region or

XX the 3' UTR region human integrin-linked kinase (hIK). The antisense

XX oligonucleotides are useful for inhibiting the expression of human hIK in

XX human cells or tissues, in vitro. The oligonucleotides can be utilized

XX for diagnostics, therapeutics for the treatment of diseases associated

XX with the expression of hIK, prophylaxis e.g. to prevent or delay

XX infection, inflammation or tumor formation and as research reagent

XX Sequence 20 BP; 5 A; 2 C; 10 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 1.3e+03;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 856 GAGGAGCTGTGGAGGCTG 874

Db 2 GAGGAGCAGGTGGAGACTG 20

RESULT 1076

ABQ75387/c

ID ABQ75387 standard; DNA; 20 BP.

XX AC ABQ75387;

XX 06-NOV-2002 (first entry)

XX Human RNase HII antisense oligonucleotide SEQ ID NO:20.

XX Unexplained recurrent pregnancy loss; immunologic reproductive failure;

XX URPL; interleukin-1beta; IL-1beta; human; tumour necrosis factor a;

XX promoter; PCR; primer; ss.

RNase H; antisense technology; inhibition; antisense oligonucleotide;

phosphorothioate; ss.

OS Homo sapiens.

XX Key Location/Qualifiers

modified_base 1..20

FT /tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyl gapmer with an 8 nucleotide

FT deoxy gap and a phosphorothioate backbone; cytosine

FT residues are 5-methyl cytosines"

XX WO200264841-A1.

XX 22-AUG-2002.

XX 12-FEB-2002; 2003WO-US004243.

XX 12-FEB-2001; 2001US-00781712.

XX (ISIS-) ISIS PHARM INC.

XX Crooke ST, Lima WF, Wu H;

XX WPI; 2002-657606/70.

XX Use of a mammalian, particularly human, RNase H, for treating an animal

XX with a disease or condition associated with a human RNase H, for

XX inhibiting the expression of a protein, or for reducing cellular RNA via

XX antisense technology.

XX Claim 38; Page 37; 70pp; English.

XX The present invention describes a method for promoting the inhibition of

XX the expression of a protein comprising employing a mammalian RNase H

XX polypeptide so that cleavage of an RNA strand of an oligonucleotide-RNA

XX complex duplex occurs. Also described is a compound 8 to 50 nucleobases

XX in length targeted to the nucleic acid encoding the human RNase HII

XX polypeptide, where the compound specifically hybridizes with and inhibits

XX the expression of a human RNase HII polypeptide. The compound, which is

XX an antisense oligonucleotide, is useful for inhibiting the expression of

XX a human RNase HII polypeptide in cells or tissues, as well as for

XX treating an animal with a disease or condition associated with a human

XX RNase HII polypeptide. The method is useful for inhibiting the expression

XX of a protein, particularly for reducing cellular RNA via antisense

XX technology. The present sequence represents a human RNase HII antisense

XX oligonucleotide, which is used in an example from the present invention

XX Sequence 20 BP; 4 A; 12 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 1.3e+03;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 938 TGGTGTGGCGCTGTGAC 956

Db 20 TGGTGTGGCGCTGTGAGC 2

RESULT 1077

AAD35203

ID AAD35203 standard; DNA; 20 BP.

XX AC AAD35203;

XX 25-JUL-2002 (first entry)

XX Human TNFA promoter amplifying PCR primer #1.

XX Unexplained recurrent pregnancy loss; immunologic reproductive failure;

XX URPL; interleukin-1beta; IL-1beta; human; tumour necrosis factor a;

XX promoter; PCR; primer; ss.

PI Viney JL, Sims JE, Dubose RF, Baum PR, Hasel KW, Hilbush BS;
XX WPI; 2002-426279/45.
XX
XX New isolated nucleic acid molecules that are associated with ileitis, for
PT preventing, treating, modulating and diagnosing ileitis in a mammalian
PT subject.
XX
XX Disclosure; Page 227; 273pp; English.
XX
XX The invention relates to a novel isolated nucleic acid molecule
CC comprising a polynucleotide having one of 90 polynucleotide sequences,
CC given in the specification. The polynucleotides of the invention have
CC antiinflammatory activity, and may have a use in gene therapy. The
CC polynucleotide or a polypeptide encoded by it is used for preventing,
CC treating, modulating or ameliorating a medical condition such as ileitis.
CC The polypeptide or polynucleotide is also useful for manufacturing a
CC medicament for treating ileitis. The sequence represents a real-time
CC validation primer for the DNA sequence obtained from one of the mouse
CC clones of the invention
XX
XX
SQ Sequence 20 BP; 3 A; 4 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2687 AGGCTTCCACATCCAC 2705
DB 19 AGGCTGCCACATCCAC 1
RESULT 1080
ABQ81623/c
ID ABQ81623 standard; DNA; 20 BP.
XX
XX ABQ81623;
XX
XX 12-DEC-2002 (first entry)
XX
XX CYP2E1 sense primer.
XX
XX Transgenic animal; drug; fetotoxicity; teratogenicity; antidiabetic;
KW neuroprotective; cerebroprotective; nootropic; cytostatic; cardiant;
KW nephrotropic; osteopathic; antiallergic; antiarteriosclerotic;
KW anti-microbial; diabetes; infection; dementia; cytochrome P; PCR; primer;
ss.
XX
XX Homo sapiens.
XX
XX WO200266635-A1.
XX
XX 29-AUG-2002.
XX
XX 21-FEB-2002; 2002WO-JP001555.
XX
XX 23-FEB-2001; 2001JP-00047735.
XX
XX (GENC-) GENCOM CORP.
XX
XX Katsuki M, Kamataki T, Teranishi Y, Ishida M, Kato M;
PI WPI; 2002-674938/72.
XX
XX Transgenic animals having drug metabolism enzyme genes, useful in testing
PT fetotoxicity and/or teratogenicity and applicable to drug development for
PT diseases including diabetes, infections and dementia.
XX
XX Example 2; Page 27; 60pp; Japanese.
XX
XX The invention relates to a recombinant gene that comprises, a gene
CC encoding human P450 or its variant, the human E1alpha promoter, chick
CC beta globin insulator sequence or a part of it, and the SV40 polyA-

CC attached signal. The activity of the gene of the invention may be
CC described as, antidiabetic, neuroprotective, cerebroprotective,
CC nootropic, cytostatic, cardiant, nephrotropic, osteopathic, antiallergic,
CC antiarteriosclerotic and anti-microbial. The invention of this invention
CC is to provide a transgenic animal. The animal is useful in testing
CC fetotoxicity and/or teratogenicity, and is applicable to drug development
CC for diseases including diabetes, infections and dementia. The current
CC sequence represents a primer designated CYP2E1 sense primer, which is
CC used in an example from the invention in the amplification of cytochrome
CC P from total RNA from human liver
XX
XX
SQ Sequence 20 BP; 2 A; 8 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 842 TGCTGCCAGCCGAGGAGGA 860
DB 20 TGCTGCCAGCCGAGGAGGA 2
RESULT 1081
ABS57369/c
ID ABS57369 standard; DNA; 20 BP.
XX
XX ABS57369;
XX
XX 04-FEB-2003 (first entry)
XX
XX Human cancer cell growth suppressing protein PP6781 cDNA, PCR primer #1.
DE Human cancer cell growth suppressing protein PP6781 cDNA, PCR primer #1.
XX Human; cancer cell growth suppression; cancer; PP6781; PCR; primer; ss.
XX Homo sapiens.
XX
XX CN1351080-A.
XX
XX 29-MAY-2002.
XX
XX 31-OCT-2000; 2000CN-00127101.
XX
XX 31-OCT-2000; 2000CN-00127101.
XX
XX (SHAN-) SHANGHAI INST ONCOLOGY.
XX
XX Gu J;
XX
XX WPI; 2002-609436/66.
XX
XX New human protein with cancer cell growth suppressing function and a
PT polynucleotide encoding it, for treating diseases, such as, cancer.
XX
XX Example 2; Page 11 (disclosure); 36pp; Chinese.
XX
XX The present invention relates to the isolation of novel human proteins
CC (designated PP491, PP5644, PP6068, PP6361, PP6455, PP6489, PP6614,
CC PP6781, PP6832 and PP6933) with cancer cell growth suppressing function,
CC and the polynucleotide sequences encoding them. Also described is the
CC process for preparing the proteins by DNA recombination and the
CC application of the polypeptides and polynucleotides in treating diseases
CC such as cancer. ABS5735-ABS57374 represent PCR primers used in the
CC examples of the present invention
XX
XX
SQ Sequence 20 BP; 3 A; 9 C; 1 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1353 GGAGATGATGAAGATGATC 1371
DB 20 GGGATGAGGAAGATGATC 2

```
RESULT 1082
ID ABX78139/c
XX ABX78139 standard; DNA; 20 BP.
XX
XX ABX78139;
XX
XX 16-APR-2003 (first entry)
XX
XX Murine p38-alpha MAPK antisense oligonucleotide ISIS NO 100802.
XX
XX p38 mitogen-activated protein kinase; p38 MAPK; phosphorothioate;
XX antisense; antiarthritic; antiinflammatory; kinase inhibitor; mouse;
XX inflammatory disease; rheumatoid arthritis; gene therapy; ss.
XX
XX Mus musculus.
XX
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "nucleotides 1-5 and 16-20 are 2'-methoxyethoxy
XX (MOE) nucleotides, nucleotides 1-4 and 16-19 are linked
XX via phosphodiester linkages, nucleotides 6-15 are 2'-
XX deoxy- nucleotides, nucleotides 5-16 are linked via
XX phosphorothioate linkages, all C nucleotides are 5-
XX methyl cytosines"
XX
XX US6448079-B1.
XX
XX 10-SEP-2002.
XX
XX 15-AUG-2000; 2000US-00640101.
XX
XX 06-APR-1999; 99US-00286904.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Gaarde WA, Nero P, McKay R;
XX
XX WPI; 2003-089122/08.
XX
XX New antisense compound, useful for preparing a composition for
XX diagnosing, treating or preventing inflammatory diseases, e.g. rheumatoid
XX arthritis.
XX
XX Example 5; Col 27-28; 44pp; English.
XX
XX This invention describes a novel antisense compound, which is 8-30
XX nucleobases in length targeted to a nucleic acid molecule encoding p38
XX mitogen-activated protein kinase (MAPK). The products of the invention
XX have antiarthritic and antiinflammatory activity, can act as act as
XX kinase inhibitors. The antisense compound is useful for preparing a
XX composition for diagnosing, treating or preventing inflammatory diseases,
XX e.g. rheumatoid arthritis or for use in antisense gene therapy. This
XX sequence represents an antisense oligonucleotide used in a method to
XX inhibit p38 MAPK
XX
XX Sequence 20 BP; 2 A; 10 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 1.3e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX Qy 43 GGGCCCCAGCGGTGCAGG 61
XX ||||| ||||| ||||| |||||
XX Db 20 GTGCCGACGCGGTGCAGG 2
XX
XX RESULT 1083
XX ABZ74966/c
XX ID ABZ74966 standard; DNA; 20 BP.
XX
XX ABZ74966;
XX
XX 10-MAY-2003 (first entry)
XX
XX Human p70 S6 kinase phosphorothioate antisense oligo, SEQ ID NO:24.
XX
XX Human; p70 S6 kinase; SK6; p70/p85 S6 kinase; pp70s6k;
XX p70/p85 ribosomal S6 kinase; serine-threonine kinase;
XX ribosomal S6 protein phosphorylation; protein synthesis;
XX cell cycle progression; immune response; signalling cascade;
XX cancer progression; lipotoxic disorder; obesity; metabolic disorder;
XX hyperproliferative disorder; cancer; cytostatic; expression inhibition;
XX phosphorothioate; antisense oligonucleotide; ss.
XX
XX Homo sapiens.
XX
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate linkages. When bases 1-5 and 16-
XX 20 are not 2'-methoxyethyl (2'-MOE) nucleotides, all
XX cytosines in the oligonucleotide are 5-methylcytosine"
XX
XX modified_base 1..5
XX /tag= b
XX /mod_base= OTHER
XX /note= "Optionally 2'-methoxyethyl (2'-MOE) nucleotides.
XX All 2' MOE cytosines are 5-methylcytosine"
XX
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "Optionally 2'-methoxyethyl (2'-MOE) nucleotides.
XX All 2' MOE cytosines are 5-methylcytosine"
XX
XX WO2003012032-A2.
XX
XX 13-FEB-2003.
XX
XX 19-JUL-2002; 2002WO-US023123.
XX
XX 01-AUG-2001; 2001US-00920677.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Cowseert LM;
XX
XX WPI; 2003-239516/23.
XX
XX Novel antisense compound which is targeted to nucleic acid encoding p70
XX S6 kinase, and inhibits expression of p70 S6 kinase, useful for treating
XX a condition associated with p70 S6 kinase, e.g. cancer.
XX
XX Claim 3; Page 73; 93pp; English.
XX
XX Sequences ABZ74952-ABZ74991 represent antisense oligonucleotides targeted
XX to the human p70 S6 kinase gene, which inhibit its expression. The
XX antisense oligonucleotides were designed to target different regions of
XX the human p70 S6 kinase RNA, and were analysed for their effect on mRNA
XX levels by quantitative real-time PCR. p70 S6 kinase (also known as SK6,
XX p70/p85 S6 kinase, p70/p85 ribosomal S6 kinase and pp70s6k) is a serine-
XX threonine kinase responsible for the phosphorylation of the ribosomal S6
XX protein, which in turn stimulates protein synthesis. p70 S6 kinase
XX function is essential for cell cycle progression, and has also been
XX implicated in the regulation of the immune response. p70 S6 kinase is
XX itself activated via phosphorylation, a process influenced by upstream
XX signalling cascades and by hyperinsulinaemia, and may play a role in the
XX progression of colon cancer and in the development of lipotoxic disorders
XX and obesity. The oligonucleotides of the invention are useful for the
XX prevention and treatment of conditions associated with p70 S6 kinase,
XX such as hyperproliferative disorders such as cancer, and metabolic
XX disorders. They are also useful in research and diagnostics for
XX modulating the expression of p70 S6 kinase
```

XX SQ Sequence 20 BP; 2 A; 12 C; 1 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 1.3e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 853 GAGGAGGAGCTGTGGAGG 871
 ||||| ||||| |||||
 Db 20 GAGGATGAGCTGGAGGAGG 2

RESULT 1084
 ABT16306
 ID ABT16306 standard; DNA; 20 BP.
 XX AC ABT16306;
 XX DT 20-MAR-2003 (first entry)
 XX DE Zinc finger protein 9 DNA PCR primer SEQ ID No 6.
 XX KW Repeat tract; intron 1; zinc finger protein 9; myotonic dystrophy type 2;
 XX KW DM2; PCR; primer; ss.
 XX OS Unidentified.
 XX PN W0200292763-A2.
 XX PD 21-NOV-2002.
 XX PF 10-MAY-2002; 2002WO-US014837.
 XX PR 11-MAY-2001; 2001US-0290365P.
 XX PR 29-JUN-2001; 2001US-0302022P.
 XX PR 13-NOV-2001; 2001US-0337831P.
 XX PA (MINU) UNIV MINNESOTA.
 XX PA (RANU/) RANUM L P W.
 XX PA (DAYJ/) DAY J W.
 XX PA (LIQU/) LIQUORI C.
 XX PI Rannu LPW, Day JW, Liquori C;
 XX WPI; 2003-129277/12.
 XX PR New isolated polynucleotide for determining whether an individual has, is
 PT at risk, or is not at risk for developing myotonic dystrophy type 2,
 PT comprises a repeat tract within intron 1 of the zinc finger protein 9
 PT genomic sequence.
 XX Example 1; Page 21; 66pp; English.
 XX The invention relates to the isolated polynucleotides of a repeated tract
 CC within intron 1 of the zinc finger protein 9. The isolated
 CC polynucleotides comprise nucleotides 1-14468, 14474-22400, 17501-17701
 CC and optionally a repeat tract, 17858-18062 and optionally a repeat tract,
 CC of a 22400 base pair sequence given in the specification, or its
 CC complements, or at least about 15 consecutive nucleotides from 15701-
 CC 17701 or 17858-18062 of the 22400 bp sequence. The polynucleotides of the
 CC invention are useful in identifying individuals at risk for developing
 CC myotonic dystrophy type 2 (DM2). This polynucleotide sequence represents
 CC a PCR primer of the human zinc finger protein 9 of the invention
 XX Sequence 20 BP; 1 A; 2 C; 8 G; 9 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 1.3e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2325 GTGTGTGTGGTGTGTGTG 2343
 ||||| ||||| |||||
 Db 1 GTGTGTGTGCATTTGTGTG 19

RESULT 1085
 ADA09089/c
 ID ADA09089 standard; DNA; 20 BP.
 XX AC ADA09089;
 XX DT 06-NOV-2003 (first entry)
 XX DE Porcine circovirus PCV-2 sequencing/PCR primer CV 3.
 XX KW ss; PCV-2; PCR; primer; RFLP; restriction fragment length polymorphism;
 KW postweaning multisystemic wasting syndrome; PMWS; anti-viral;
 KW porcine circovirus infection.
 XX OS Porcine circovirus type 2.
 XX PN US2003096377-A1.
 XX PD 22-MAY-2003.
 XX PF 27-JUN-2002; 2002US-00184191.
 XX PR 28-JUN-2001; 2001US-0301707P.
 XX PA (VIRG) VIRGINIA TECH INTELLECTUAL PROPERTIES.
 XX PI Meng X, Fenaux M;
 XX WPI; 2003-606420/57.
 XX PT Detecting and differentiating porcine circovirus infections utilizing a
 PT differential polymerase chain reaction-restriction fragment length
 PT polymorphism assay using a restriction enzyme and primer.
 XX Example 3; Page 9; 21pp; English.
 XX The invention relates to detecting and differentiating porcine circovirus
 CC (PCV) infections, comprises extracting nucleic acid from a biological
 CC sample taken from a pig; amplifying a fragment from the extracted nucleic
 CC acid, digesting the amplified fragment with a restriction enzyme, forming
 CC a restriction fragment length polymorphism (RFLP) pattern from an
 CC undigested or digested fragment, and detecting the presence or absence of
 CC a PCV isolate. Also included are an oligonucleotide primer for
 CC differentiating PCV infections, comprising a fully defined MCV1 or MCV2
 CC nucleotide sequences (ADA09085 and ADA09086) and an assay kit for
 CC detecting and differentiating PCV infections, comprising the
 CC oligonucleotide primers and a restriction enzyme. The methods and
 CC compositions of the present invention are useful for diagnosing and
 CC treating porcine circovirus infection (especially postweaning
 CC multisystemic wasting syndrome, PMWS, in pigs). The method of the present
 CC invention, as compared to prior art, is more rapid, sensitive, easy to
 CC perform and specific for the porcine circovirus and its associated
 CC disease. The present sequence is a PCR/sequencing primer for performing
 CC the method of the invention.
 XX Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 1.3e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2420 CTGCTGTGCAACGGTCTCC 2438
 ||||| ||||| |||||
 Db 20 CTGCTGTGCAACGGTCAACC 2

RESULT 1086
 ADB25743
 ID ADB25743 standard; DNA; 20 BP.
 XX AC ADB25743;
 XX

```

XX 20-NOV-2003 (first entry)
XX Mouse connective tissue growth factor antisense oligo DNA (SeqID 136).
DE antisense; mouse; murine; ss; connective tissue growth factor; CTGF;
DE chromosome 6q23.1; ctgrofact; fibroblast inducible secreted protein;
KW fisp-12; NOV2;
KW insulin-like growth factor binding protein-related protein 2; IGFBP-rp2;
KW IGFBP-8; Hcs24; ecogenin; acute lymphoblastic leukaemia; gene therapy;
KW hyperproliferative disorder; cancer; pulmonary fibrosis; renal fibrosis;
KW scleroderma; atherosclerosis; cytostatic; dermatological;
KW antiarteriosclerotic.
XX Mus sp.
XX Key Location/Qualifiers
FH modified_base 1...20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone, where 1-5 and
FT 16-20 are 2' methoxyethyl nucleotides. All cytidines are
FT 5-methylcytidines"
XX WO2003053340-A2.
XX 03-JUL-2003.
XX 09-DEC-2002; 2002WO-US038618.
XX 10-DEC-2001; 2001US-00006191.
XX (ISIS-) ISIS PHARM INC.
XX Gaarde WA, Watt AT;
XX WPI; 2003-559091/52.
XX New antisense oligonucleotides for modulating connective tissue growth
XX factor expression, particularly useful for treating cancers (e.g. breast
XX or prostate cancer), pulmonary or renal fibrosis, scleroderma or
XX atherosclerosis.
XX Claim 3; Page 89; 139pp; English.
XX This invention relates to novel methods for modulating the expression of
XX connective tissue growth factor (CTGF) by antisense oligonucleotides.
XX CTGF has been mapped to human chromosome region 6q23.1, and is also known
XX as ctgrofact, fibroblast inducible secreted protein, fisp-12, NOV2,
XX insulin-like growth factor binding protein-related protein 2, IGFBP-rp2,
XX IGFBP-8, Hcs24 and ecogenin. It is known to stimulate DNA synthesis and
XX promote chemotaxis of fibroblasts, however, it is also upregulated in
XX acute lymphoblastic leukaemia and in tumour or endothelial cells
XX associated with the vasculature. Accordingly, antisense oligonucleotides
XX that inhibit the expression of CTGF in cells or tissues can be used in
XX gene therapy to treat various conditions including hyperproliferative
XX disorders (particularly cancer, e.g. breast, prostate or renal cancer),
XX pulmonary fibrosis, renal fibrosis, scleroderma and atherosclerosis. As
XX such, the present invention describes these antisense oligos as having
XX cytostatic, dermatological and antiarteriosclerotic activities. This
XX oligonucleotide sequence is a chimeric phosphorothioate antisense oligo
XX with 2' MOE wings and a deoxy gap, which is used to inhibit expression of
XX mouse CTGF of the invention.
XX Sequence 20 BP; 11 A; 1 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2824 ATATATACATATATATATA 2842
Db 2 AAATATATATATATATATA 20

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RESULT 1087
ADB25743/C
ID ADB25743 standard; DNA; 20 BP.
XX ADB25743;
XX ADB25743;
XX 20-NOV-2003 (first entry)
DE Mouse connective tissue growth factor antisense oligo DNA (SeqID 136).
XX antisense; mouse; murine; ss; connective tissue growth factor; CTGF;
XX chromosome 6q23.1; ctgrofact; fibroblast inducible secreted protein;
KW fisp-12; NOV2;
KW insulin-like growth factor binding protein-related protein 2; IGFBP-rp2;
KW IGFBP-8; Hcs24; ecogenin; acute lymphoblastic leukaemia; gene therapy;
KW hyperproliferative disorder; cancer; pulmonary fibrosis; renal fibrosis;
KW scleroderma; atherosclerosis; cytostatic; dermatological;
KW antiarteriosclerotic.
XX Mus sp.
XX Key Location/Qualifiers
FH modified_base 1...20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone, where 1-5 and
FT 16-20 are 2' methoxyethyl nucleotides. All cytidines are
FT 5-methylcytidines"
XX WO2003053340-A2.
XX 03-JUL-2003.
XX 09-DEC-2002; 2002WO-US038618.
XX 10-DEC-2001; 2001US-00006191.
XX (ISIS-) ISIS PHARM INC.
XX Gaarde WA, Watt AT;
XX WPI; 2003-559091/52.
XX New antisense oligonucleotides for modulating connective tissue growth
XX factor expression, particularly useful for treating cancers (e.g. breast
XX or prostate cancer), pulmonary or renal fibrosis, scleroderma or
XX atherosclerosis.
XX Claim 3; Page 89; 139pp; English.
XX This invention relates to novel methods for modulating the expression of
XX connective tissue growth factor (CTGF) by antisense oligonucleotides.
XX CTGF has been mapped to human chromosome region 6q23.1, and is also known
XX as ctgrofact, fibroblast inducible secreted protein, fisp-12, NOV2,
XX insulin-like growth factor binding protein-related protein 2, IGFBP-rp2,
XX IGFBP-8, Hcs24 and ecogenin. It is known to stimulate DNA synthesis and
XX promote chemotaxis of fibroblasts, however, it is also upregulated in
XX acute lymphoblastic leukaemia and in tumour or endothelial cells
XX associated with the vasculature. Accordingly, antisense oligonucleotides
XX that inhibit the expression of CTGF in cells or tissues can be used in
XX gene therapy to treat various conditions including hyperproliferative
XX disorders (particularly cancer, e.g. breast, prostate or renal cancer),
XX pulmonary fibrosis, renal fibrosis, scleroderma and atherosclerosis. As
XX such, the present invention describes these antisense oligos as having
XX cytostatic, dermatological and antiarteriosclerotic activities. This
XX oligonucleotide sequence is a chimeric phosphorothioate antisense oligo
XX with 2' MOE wings and a deoxy gap, which is used to inhibit expression of
XX mouse CTGF of the invention.
XX Sequence 20 BP; 11 A; 1 C; 0 G; 8 T; 0 U; 0 Other;

```

| | | |
|-----------------------|---|------------------------------------|
| Query Match | | 0.4%; Score 15.8; DB 1; Length 20; |
| Best Local Similarity | | 89.5%; Pred. No. 1.3e+03; |
| Matches | 17; Conservative | 0; Mismatches 2; Indels 0; Gaps 0; |
| | | |
| QY | 2823 TATATATACATATATATAT 2841 | |
| Db | 20 TATATATATATATATATTT 2 | |
| | | |
| RESULT 1088 | | |
| ADC65837/c | | |
| ID | ADC65837 standard; DNA; 20 BP. | |
| XX | | |
| AC | ADC65837; | |
| XX | | |
| DT | 18-DEC-2003 (first entry) | |
| XX | | |
| DE | Mouse TGF-beta receptor II targeted antisense oligonucleotide #36. | |
| XX | | |
| KW | mouse; antisense oligonucleotide; | |
| KW | transforming growth factor beta receptor II; TGF-beta receptor II; | |
| KW | hyperproliferative disorder; breast cancer; autoimmune disorder; | |
| KW | rheumatoid arthritis; 2'-O-methoxyethyl gapmer; | |
| KW | phosphorothioate backbone; ss; murine. | |
| XX | | |
| OS | Mus musculus. | |
| XX | | |
| PN | WO2003000656-A2. | |
| XX | | |
| PD | 03-JAN-2003. | |
| XX | | |
| PF | 19-JUN-2002; 2002WO-US019665. | |
| XX | | |
| PR | 21-JUN-2001; 2001US-00888361. | |
| XX | | |
| PA | (ISIS-) ISIS PHARM INC. | |
| XX | | |
| PI | Murray SF, Wyatt JR; | |
| XX | | |
| DR | WPI; 2003-175279/17. | |
| XX | | |
| PT | New compound having a sequence targeted to a nucleic acid encoding | |
| PT | transforming growth factor beta-receptor II, useful for preparing a | |
| PT | composition for treating hyperproliferative disorder e.g., lung, liver, | |
| PT | colon or gastric cancer. | |
| XX | | |
| PS | Claim 3; SEQ ID NO 133; 141pp; English. | |
| XX | | |
| CC | The invention comprises antisense oligonucleotides that are targeted to | |
| CC | the nucleic acid encoding transforming growth factor beta (TGF-beta) | |
| CC | receptor II. The antisense oligonucleotides of the invention are useful | |
| CC | for treating: hyperproliferative disorders (e.g. breast cancer), or an | |
| CC | autoimmune disorder (e.g. rheumatoid arthritis). The present DNA sequence | |
| CC | represents a 2'-O-methoxyethyl gapmer oligonucleotide with a | |
| CC | phosphorothioate backbone that is targeted to mouse TGF-beta receptor II. | |
| XX | | |
| SQ | Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other; | |
| | | |
| Query Match | | 0.4%; Score 15.8; DB 1; Length 20; |
| Best Local Similarity | | 89.5%; Pred. No. 1.3e+03; |
| Matches | 17; Conservative | 0; Mismatches 2; Indels 0; Gaps 0; |
| | | |
| QY | 1453 AAGGGTAACCTGGCGGAGT 1471 | |
| Db | 20 AAGGGCAACTGCAGGAGT 2 | |
| | | |
| RESULT 1089 | | |
| ADC10516/c | | |
| ID | ADC10516 standard; DNA; 20 BP. | |
| XX | | |
| AC | ADC10516; | |
| XX | | |

| | | |
|----|--|--|
| DT | 18-DEC-2003 (first entry) | |
| XX | | |
| DE | Human NOVX polypeptide gene forward primer SEQ ID NO: 535. | |
| XX | | |
| KW | ss; primer; cytostatic; antidiabetic; anorectic; cerebroprotective; | |
| KW | neuroprotective; antiinflammatory; gene therapy; antisense therapy; | |
| KW | thyromimetic; NOVX; pathology; cancer; diabetes; obesity; | |
| KW | endocrine disorder; CNS disorder; inflammatory disorder; | |
| KW | chromosome mapping; tissue typing; predictive medicine. | |
| XX | | |
| OS | Homo sapiens. | |
| XX | | |
| PN | WO2003000842-A2. | |
| XX | | |
| PD | 03-JAN-2003. | |
| XX | | |
| PF | 04-JUN-2002; 2002WO-US017443. | |
| XX | | |
| PR | 04-JUN-2001; 2001US-0295607P. | |
| PR | 04-JUN-2001; 2001US-0295661P. | |
| PR | 06-JUN-2001; 2001US-0296404P. | |
| PR | 06-JUN-2001; 2001US-0296418P. | |
| PR | 07-JUN-2001; 2001US-0296575P. | |
| PR | 11-JUN-2001; 2001US-0297414P. | |
| PR | 12-JUN-2001; 2001US-0295573P. | |
| PR | 12-JUN-2001; 2001US-0297567P. | |
| PR | 14-JUN-2001; 2001US-0298285P. | |
| PR | 15-JUN-2001; 2001US-0298528P. | |
| PR | 18-JUN-2001; 2001US-0299133P. | |
| PR | 19-JUN-2001; 2001US-0299230P. | |
| PR | 21-JUN-2001; 2001US-0299949P. | |
| PR | 22-JUN-2001; 2001US-0300177P. | |
| PR | 26-JUN-2001; 2001US-0300883P. | |
| PR | 28-JUN-2001; 2001US-0301530P. | |
| PR | 28-JUN-2001; 2001US-0301550P. | |
| PR | 03-JUL-2001; 2001US-0302951P. | |
| PR | 31-JUL-2001; 2001US-0308900P. | |
| PR | 14-SEP-2001; 2001US-0322297P. | |
| PR | 25-SEP-2001; 2001US-0324669P. | |
| PR | 03-DEC-2001; 2001US-0337477P. | |
| PR | 14-DEC-2001; 2001US-0341562P. | |
| PR | 21-FEB-2002; 2002US-0358656P. | |
| PR | 21-FEB-2002; 2002US-0359122P. | |
| PR | 22-FEB-2002; 2002US-0358978P. | |
| PR | 22-FEB-2002; 2002US-0359034P. | |
| PR | 22-FEB-2002; 2002US-0359035P. | |
| PR | 22-FEB-2002; 2002US-0359121P. | |
| PR | 27-FEB-2002; 2002US-0359964P. | |
| PR | 01-MAR-2002; 2002US-0360858P. | |
| PR | 12-MAR-2002; 2002US-0363430P. | |
| PR | 12-MAR-2002; 2002US-0363676P. | |
| PR | 10-APR-2002; 2002US-0371346P. | |
| PR | 10-MAY-2002; 2002US-0379444P. | |
| PR | 04-JUN-2002; 2002US-00379444. | |
| XX | | |
| PA | (CURA-) CURAGEN CORP. | |
| XX | | |
| PI | Agee ML, Anderson DW, Berghs C, Casman SJ, Catterton E; | |
| PI | Dipippo VA, Edinger SR, Eisen A, Ellerman K, Gangolli EA; | |
| PI | Kerlach VL, Gorman L, Guo X, Herrmann JL, Hjal T, Ji W, Kekuda R; | |
| PI | Khramtsov NV, Liu L, Liu X, Malyankar UM, Miller CE, Millet I; | |
| PI | Ort T, Padigar M, Patturajan M, Pena CEA, Rastelli L, Rieger DK; | |
| PI | Rothenberg ME, Shenoy SG, Shimkets RA, Smithson G, Spaderna SK; | |
| PI | Spytek KA, Stone DJ, Vernet CM, Zhong H, Zhong M, Alsobrook JP; | |
| PI | Burgess CE, Lepley DM; | |
| XX | | |
| DR | WPI; 2003-210149/20. | |
| XX | | |
| PT | New isolated NOVX polypeptides and nucleic acid molecules useful for | |
| PT | treating, preventing and diagnosing pathological conditions with NOVX- | |
| PT | associated disorders, such as cancer, obesity, diabetes and inflammatory | |
| PT | or CNS diseases. | |
| XX | | |

PS Example B; SEQ ID NO 535; 772pp; English.

XX The invention relates to novel isolated polypeptides, mature form of the

CC polypeptide, a sequence that is 95% identical to the polypeptide or the

CC polypeptide comprising one or more conservative substitutions. The NOVX

CC polypeptide is useful for treating or preventing a pathology associated

CC with the polypeptide e.g. disorders associated with aberrant expression

CC or activity of the polypeptide, such as cancer, diabetes, obesity, and

CC endocrine, CNS and inflammatory disorders. They can also be used in

CC various detection and screening assays, chromosome mapping, tissue typing

CC and predictive medicine. This sequence corresponds to a primer used to

CC amplify and isolate the coding sequence for one of the polypeptides of

CC the invention.

XX

SQ Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 1.3e+03;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1667 TGAAGATCGCAGACTTCGG 1685

DB 20 TGAAGATTGCTGACTTCGG 2

RESULT 1090

ADG93018/c

ID ADG93018 standard; DNA; 20 BP.

XX

AC ADG93018;

DT 11-MAR-2004 (first entry)

XX

DE Human FT-beta subunit phosphorothioate oligonucleotide #46.

XX

KW Human; farnesyl transferase beta subunit; ss; FT-beta subunit;

KW antisense oligonucleotide; phosphorothioate linkage;

KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;

KW hyperproliferative disorder; cancer; ovarian carcinoma; adenocarcinoma;

KW colorectal cancer; pancreatic cancer; prostate cancer;

KW inflammatory condition; tumour formation; cytostatic; antinflammatory;

KW antimicrobial; phosphorothioate oligonucleotide.

XX

OS Synthetic.

OS Homo sapiens.

XX

PN US2003212017-A1.

XX

PD 13-NOV-2003.

XX

PF 10-MAY-2002; 2002US-00144488.

XX

PR 10-MAY-2002; 2002US-00144488.

XX

PA (ISIS-) ISIS PHARM INC.

XX

PI Monia BP, Freier SM;

XX

DR WPI; 2003-901641/82.

XX

PT New compounds that hybridizes with nucleic acid molecules encoding

PT farnesyl transferase beta subunit and inhibits the expression of farnesyl

PT transferase beta subunit, useful for treating e.g. cancer or inflammatory

PT disease.

XX

PS Example 15; SEQ ID NO 53; 44pp; English.

XX

CC The invention relates to a compound targeted to a nucleic acid molecule

CC encoding the human farnesyl transferase beta (FT-beta) subunit and

CC inhibits the expression of the (FT-beta) subunit, or specifically

CC hybridises with at least an 8-nucleobase portion of an active site on a

CC nucleic acid molecule encoding the FT-beta subunit. The invention also

CC relates to a method of inhibiting the expression of the FT-beta subunit

CC

CC in cells or tissues and a method of treating an animal having a disease

CC or condition associated with the FT-beta subunit. The compound is an

CC antisense oligonucleotide, preferably a chimeric oligonucleotide, which

CC comprises at least one modified internucleoside linkage which is a

CC phosphorothioate linkage, at least one modified sugar moiety which is a

CC 2'-O-methoxyethyl sugar moiety or at least one modified nucleobase which

CC is a 5-methylcytosine. The compound is useful in inhibiting the expression

CC of the FT-beta subunit in cells or tissues. It can also be used for

CC treating cells or conditions associated with the FT-beta subunit, such as

CC hyperproliferative disorders, including cancer (such as ovarian

CC carcinoma, adenocarcinoma, colorectal cancer, pancreatic cancer or

CC prostate cancer) and inflammatory conditions. The antisense compounds can

CC also be used as research agents, in diagnostics or for preventing or

CC delaying infection, inflammation or tumour formation. This sequence

CC represents a human farnesyl transferase beta subunit phosphorothioate

CC oligonucleotide of the invention.

XX

SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 1.3e+03;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3727 AAACCGCGAGTGGCGATTT 3745

DB 20 AAGCCGCGAGATCGGATTT 2

RESULT 1091

ADH93257/c

ID ADH93257 standard; DNA; 20 BP.

XX

AC ADH93257;

DT 22-APR-2004 (first entry)

XX

DE Human gene PCR primer #102.

KW human; gene sequence; single nucleotide polymorphism; SNP;

KW disease diagnosis; ss; PCR; primer.

XX

OS Homo sapiens.

XX

PN JP2003174883-A.

XX

PD 24-JUN-2003.

XX

PF 11-DEC-2001; 2001JP-00377637.

XX

PR 11-DEC-2001; 2001JP-00377637.

XX

PA (KAGA-) KAGAKU GIUTSU SHINKO JIGYODAN.

XX

DR WPI; 2003-819215/77.

XX

PT Polynucleotide for detecting single nucleotide polymorphisms existing in

PT human gene, contains isolated human gene having specified sequence.

XX

PS Claim 2; SEQ ID NO 1094; 529pp; Japanese.

XX

CC The invention comprises isolated human gene sequences and PCR primer

CC sequences which can be used to detect single nucleotide polymorphisms

CC (SNPs). The DNA sequences of the invention are useful for detecting SNPs

CC existing in human genes and for the diagnosis of human disease. The

CC present DNA sequence represents a human gene PCR primer of the invention.

XX

SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 1.3e+03;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3778 AAGACACCTGGTGTCTAAC 3796

Db 19 AAGGACCTGGTGGCAAC 1

RESULT 1092
ABZ91732/c
ID ABZ91732 standard; DNA; 20 BP.

XX AC ABZ91732;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIC-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmacological composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX PS Disclosure; SEQ ID NO 6974; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 20 BP; 11 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2823 TATATATACATATATATAT 2841

Db 19 TATATTTTCAATATATAT 1

RESULT 1093
ABZ91730
ID ABZ91730 standard; DNA; 20 BP.

XX AC ABZ91730;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIC-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmacological composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX PS Disclosure; SEQ ID NO 6972; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 20 BP; 8 A; 0 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 3464 ATATATATCTATATATATA 3482


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Db      20 ATATACATACATATATAA 2
|||||
RESULT 1096
ADK17359
ID ADK17359 standard; DNA; 20 BP.
XX AC ADK17359;
XX AC ADK17359;
XX DE 06-MAY-2004 (first entry)
XX DE Human CCR5 protein.
XX KW anti-HIV; cytostatic; virucide; single chain antibody; antibody; yeast;
XX KW HIV; cancer; CCR5; ss.
XX OS Homo sapiens.
XX PN WO2003066830-A2.
XX PD 14-AUG-2003.
XX PF 07-FEB-2003; 2003WO-US0003763.
XX PR 08-FEB-2002; 2002US-00071866.
XX PR 08-FEB-2002; 2002US-00072031.
XX PR 25-APR-2002; 2002US-00133978.
XX PA (GENE-) GENETASTIX CORP.
XX PI Hua S, Pauling MH, Zhu L;
XX DR WPI; 2003-731501/69.
XX ST Selecting an scFv against a peptide target by expressing a target fusion
PT protein having a DNA binding domain or activation domain of a
PT transcription activator, useful for diagnosing, preventing and/or
PT treating HIV infection and cancer.
XX PS Disclosure; SEQ ID NO 4; 150pp; English.
XX CC The invention relates to a method of selecting a single chain antibody
CC (scFv) against a peptide target in a yeast by expressing a library of
CC scFv fusion proteins in yeast cells, expressing a target fusion protein
CC in the yeast cells expressing the scFv fusion proteins having either the
CC DNA binding domain or the activation domain of the transcription
CC activator which is not comprised in the scFv fusion proteins, and a
CC target peptide, and selecting those yeast cells in which a reporter gene
CC is expressed. Each scFv fusion protein comprises either an activation
CC domain or a DNA binding domain of a transcription activator and a scFv
CC having a heavy chain of a variable region (VH) of antibody whose sequence
CC varies within the library, a light chain of a variable region (VL) of
CC antibody whose sequence varies within the library independently of the VH
CC and a linker peptide which links the VH and VL. The expression of the
CC reporter gene is activated by a reconstituted transcriptional activator
CC formed by binding of the scFv fusion protein to the target fusion
CC protein. The methods and compositions of the present invention are useful
CC for preventing and/or treating HIV infection and cancer. This sequence
CC corresponds to an oligonucleotide used to generate the scFv antibody of
CC the invention.
XX SQ Sequence 20 BP; 0 A; 0 C; 16 G; 0 T; 0 U; 4 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 73.7%; Pred. No. 1.3e+03;
Matches 14; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
QY 2920 GGGCGGGCGTGGGGGGC 2938
|||||
Db 2 GGGGGGGGGGGGGGGG 20
|||||

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RESULT 1097
ADL99556
ID ADL99556 standard; DNA; 20 BP.
XX AC ADL99556;
XX AC ADL99556;
XX DT 20-MAY-2004 (first entry)
XX DE Single chain antibody sfv5AF related linker #2.
XX DE antiporiatic; antiinflammatory; neuroprotective; ophthalmological;
XX KW gastrointestinal; osteopathic; nephrotropic; gene therapy;
XX KW multimeric molecular complex; transcytotic transport;
XX KW paracellular transport; calcitonin; osteoporosis; renal failure; colitis;
XX KW gastroenteritis; inflammatory bowel disease; psoriasis;
XX KW Alzheimer's disease; optic neuropathy; ophthalmoplegia;
XX KW single chain antibody; sfv5AF; linker; heavy chain region; ds.
XX OS Synthetic.
XX PN US2003166160-A1.
XX PD 04-SEP-2003.
XX PF 06-SEP-2001; 2001US-00949039.
XX PR 06-SEP-2001; 2001US-00949039.
XX PA (HAWL/) HAWLEY S B.
XX PA (CHAP/) CHAPIN S.
XX PA (SHER/) SHERIDAN P L.
XX PA (HOUS/) HOUSTON L L.
XX PA (GLYN/) GLYNN J M.
XX PI Hawley SB, Chapin S, Sheridan PL, Houston LL, Glynn JM;
XX DR WPI; 2003-898076/82.
XX ST New multimeric molecular complex, useful for preparing a composition for
PT diagnosing or treating e.g. osteoporosis, renal failure, colitis,
PT gastroenteritis, inflammatory bowel disease, psoriasis or Alzheimer's
PT disease.
XX PS Example 5; Page 51; 91pp; English.
XX CC The invention describes a multimeric molecular complex comprising at
CC least 2 compounds, each of which has at least one targeting element
CC directed to a ligand that confers transcytotic or paracellular
CC transporting properties to a molecular complex specifically bound to the
CC ligand. Also described are: a compound comprising at least 2 targeting
CC elements directed to the ligand; a protein conjugate comprising a
CC biologically active calcitonin polypeptide having a chemical linkage to
CC at least one targeting element directed to the ligand; a pharmaceutical
CC composition comprising the compound; delivering a biologically active
CC agent to an animal; transporting a biologically active agent through an
CC epithelial barrier; treating a disease in an animal; and identifying a
CC disease in an animal. The complex is useful for preparing a composition
CC for diagnosing or treating diseases, e.g., osteoporosis, renal failure,
CC colitis, gastroenteritis, inflammatory bowel disease, psoriasis,
CC Alzheimer's disease, optic neuropathy or ophthalmoplegia. This sequence
CC represents a linker associated with the isolation of heavy chain regions
CC from the single chain antibody sfv5AF polypeptide, that targets the
CC polyclonal immunoglobulin receptor (pIgR) mediator of endocytosis, exocytosis
CC and forward and reverse transcytosis in epithelial cells,
XX SQ Sequence 20 BP; 0 A; 0 C; 16 G; 0 T; 0 U; 4 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 73.7%; Pred. No. 1.3e+03;
Matches 14; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
QY 2920 GGGCGGGCGTGGGGGGC 2938
|||||

```


CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 1.3e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1601 CCTCCCAAGAGTGCATCCA 1619
 Db 1 CCCGCGAAGTGCATCCA 19
 RESULT 1100
 ABD27959/c
 ID ABD27959 standard; DNA; 20 BP.
 AC ABD27959;
 XX
 XX
 DT 29-JUL-2004 (first entry)
 DE
 DE AA497002-derived oligonucleotide SEQ ID 6971.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 XX WPI; 2003-093058/08.
 DR
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 6971; 763pp; English.
 PS
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The

CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer,
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 6 A; 1 C; 2 G; 11 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 1.3e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2826 ATATACATATATATATATA 2844
 Db 20 ATATACATATATATATAA 2
 RESULT 1101
 ABD27960
 ID ABD27960 standard; DNA; 20 BP.
 XX
 AC ABD27960;
 XX
 DT 29-JUL-2004 (first entry)
 DE
 DE AA497002-derived oligonucleotide SEQ ID 6972.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 XX WPI; 2003-093058/08.

CC region, and selecting for one or more candidate antisense compounds which
CC inhibit the expression of a nucleic acid encoding PPP3R1. The methods
CC and compositions of the present invention are useful for the diagnosis,
CC prevention and/or treatment of diseases or conditions associated with
CC aberrant expression or activity of PPP3R1, such as autoimmune disorders,
CC conditions having aberrant calcium signaling and neurological diseases
CC like Alzheimer's disease. The present sequence is an anti-PPP3R1
CC antisense oligonucleotide of the invention.

XX Sequence 20 BP; 8 A; 1 C; 2 G; 9 T; 0 U; 0 Other;
SQ

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2823 TATATATACATATATATAT 2841
DB 19 TATATATACATATGTAAT 1

RESULT 1105
ADJ60499
ID ADJ60499 standard; DNA; 20 BP.

XX AC ADJ60499;

XX 06-MAY-2004 (first entry)

XX Oligonucleotide associated to Tryptase-a #35.

XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW airway inflammation; allergy; asthma; impeded respiration;
KW cystic fibrosis; acute respiratory distress syndrome;
KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW ss.

XX OS Homo sapiens.

XX WO2004011613-A2.

XX 05-FEB-2004.

XX 25-JUL-2003; 2003WO-US023509.

XX 29-JUL-2002; 2002US-0399076P.

XX (EPIC-) EPITGENESIS PHARM INC.

XX Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;

PI Shahabuddin S, Lu H, Cong H;

XX WPI; 2004-203534/19.

XX Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codons and introns of respiratory disease-relevant genes e.g.,
PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT disease e.g., asthma.

XX Claim 2; SEQ ID NO 1355; 85pp; English.

XX The present invention relates to an oligonucleotide anti-sense to e.g.,
CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC end of nucleic acid target comprising gene(s) chosen from e.g.
CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC oligonucleotide and optionally surfactant operatively linked to the
CC oligonucleotide. The method is useful for preventing or treating a
CC respiratory or lung disease, which involves administering to the airways
CC of a subject an effective amount of an inhibitor. The oligonucleotide is
CC useful for production of a medicament for the prevention and/or treatment
CC of a respiratory or lung disease. The respiratory or lung disease is
CC chosen from airway inflammation, allergy(ies), asthma, impeded
CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome

CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC obstruction. The present sequence represents an oligonucleotide of the
CC invention.

XX Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1601 CCTCCGAGAGTGCAATCCA 1619
DB 1 CCCCAGAGAGTGCAATCCA 19

RESULT 1106
ADJ58861
ID ADJ58861 standard; DNA; 20 BP.

XX AC ADJ58861;

XX 06-MAY-2004 (first entry)

XX Human integrin-linked kinase antisense oligonucleotide ISIS #109232.

KW Therapy; insulin resistance; hyperglycaemia; type II diabetes mellitus;
KW human; antisense; integrin-linked kinase; ILK; p59ILK; ss.

XX OS Homo sapiens.

XX Synthetic.

XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"

FT modified_base 1..5

FT /tag= a

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides where

FT cytidines are 5-methylcytidines"

FT modified_base 15..20

FT /tag= c

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides where

FT cytidines are 5-methylcytidines"

XX US2004006005-A1.

XX 08-JAN-2004.

XX 02-JUL-2002; 2002US-00188883.

XX 02-JUL-2002; 2002US-00188883.

XX (BHAN/) BHANOT S.

XX Bhanot S;

XX WPI; 2004-081735/08.

XX Treating a mammal for insulin resistance, hyperglycemia, or type II
PT diabetes mellitus comprises administering to the mammal in need of the
PT treatment an integrin-linked kinase inhibitor.

XX Example 15; SEQ ID NO 53; 48pp; English.

XX The present invention relates to a method for treating conditions of
CC insulin resistance, hyperglycaemia, and type II diabetes mellitus. The
CC present sequence is human integrin-linked kinase (ILK, p59ILK) antisense
CC oligonucleotide.

XX Sequence 20 BP; 5 A; 2 C; 10 G; 3 T; 0 U; 0 Other;

Db 1 GAGCTGCATGCCGACCACA 19

XX-----

DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1011.
XX

CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytosstatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 10 A; 8 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 1.3e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2315 GTCGTGTGTGTGTGTG 2333
 Db 20 GTATGTGTGTGTGTGTG 2

RESULT 1111
 ADM15509/C
 ID ADM15509 standard; DNA; 20 BP.
 AC ADM15509;
 XX
 DT 01-JUL-2004 (first entry)
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1696.
 XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.

Key Location/Qualifiers
 modified_base 1..20
 /tag= b
 /mod_base= OTHER
 /note= "phosphorothioate linkages and all cytidine residues are 5-methylcytidines"
 modified_base 1..5
 /tag= a
 /mod_base= OTHER
 /note= "2'-O-methoxyethyls"
 modified_base 16..20
 /tag= c
 /mod_base= OTHER
 /note= "2'-O-methoxyethyls"

WO2004028458-A2.
 08-APR-2004.
 25-SEP-2003; 2003WO-US030374.
 25-SEP-2002; 2002US-0413549P.
 (PHAA) PHARMACIA CORP.
 Gierse JK;
 WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 XX
 XX Claim 4; SEQ ID NO 1696; 132pp; English.
 XX
 XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytosstatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 10 A; 8 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 1.3e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2315 GTCGTGTGTGTGTGTG 2333
 Db 19 GTATGTGTGTGTGTGTG 1

RESULT 1112
 ADM14920/C
 ID ADM14920 standard; DNA; 20 BP.
 AC ADM14920;
 XX
 DT 01-JUL-2004 (first entry)
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1107.
 XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.

Key Location/Qualifiers
 modified_base 1..20
 /tag= b
 /mod_base= OTHER
 /note= "phosphorothioate linkages and all cytidine residues are 5-methylcytidines"
 modified_base 1..5
 /tag= a
 /mod_base= OTHER
 /note= "2'-O-methoxyethyls"
 modified_base 16..20
 /tag= c

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FT  /mod_base= OTHER
XX  /note= "2'-O-methoxyethyls"
XX  WO2004028458-A2.
XX  08-APR-2004.
XX
XX  25-SEP-2003; 2003WO-US030374.
XX
XX  25-SEP-2002; 2002US-0413549P.
XX  (PHAA ) PHARMACIA CORP.
XX
XX  Gierse JK;
XX
XX  WPI; 2004-305094/28.
XX
XX  New antisense compound, having a sequence targeted to a nucleic acid
XX  encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX  inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX  ischemia.
XX
XX  Claim 4; SEQ ID NO 1107; 132pp; English.
XX
XX  The present sequence represents a chimeric antisense oligonucleotide
XX  targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX  human mPGES-1 gene is located on chromosome 9, more specifically to
XX  9q34.3. The present invention also describes: (1) antisense compounds,
XX  having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX  mPGES-1, which specifically hybridize with the nucleic acid mPGES-1 and
XX  inhibits its expression; (2) a method of inhibiting the expression of
XX  mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX  having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX  antisense oligonucleotides and antisense compounds have cytostatic,
XX  antidiabetic, immunomodulator, cardiant, neuroprotective,
XX  antiinflammatory, neuroprotective, neurotropic, antiarthritic, vasotropic,
XX  ophthalmological, immunomodulatory and cardiovascular activities, and can
XX  be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX  can be used for preparing a composition for treating a disease or
XX  condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX  disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX  ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX  Sequence 20 BP; 8 A; 8 C; 3 G; 1 T; 0 U; 0 Other;
XX
XX  Query Match 0.4%; Score 15.8; DB 1; Length 20;
XX  Best Local Similarity 89.5%; Pred. No. 1.3e+03;
XX  Mismatches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2326 TGTGTGTCGTCGTGTGTGT 2344
DB 20 TGTGTGTCGTCGTGTGTGT 2
XX
RESULT 1113
AD045988
ID ADO45988 standard; DNA; 20 BP.
XX
XX ADO45988;
XX
XX 15-JUL-2004 (first entry)
XX
XX Human oligonucleotide #1354.
XX
XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
XX CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
XX tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
XX lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
XX asthma; lung allergy; inflammation; inflammatory disease;
XX airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
XX chronic obstructive pulmonary disease; COPD; allergic rhinitis;
XX acute respiratory distress syndrome; pulmonary hypertension;
XX lung inflammation; bronchitis; airway obstruction; bronchoconstriction.

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XX Homo sapiens.
XX US2004049022-A1.
XX
XX 11-MAR-2004.
XX
XX 25-JUL-2003; 2003US-00627930.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX (NYCE/) NYCE J W.
XX (SAND/) SANDRASAGRA A.
XX (TANG/) TANG L.
XX (AGUI/) AGUILAR D.
XX (MILL/) MILLER S.
XX (SHAH/) SHAHABUDDIN S.
XX (LUHH/) LU H.
XX (CONG/) CONG H.
XX
XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
XX Shahabuddin S, Lu H, Cong H;
XX
XX WPI; 2004-293804/27.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
XX initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
XX RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
XX asthma.
XX
XX Claim 2; SEQ ID NO 1355; 174pp; English.
XX
XX The invention relates to oligonucleotides anti-sense to an initiation
XX codon, coding region, 5' or 3' intron-exon junction, intron or region
XX with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
XX chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
XX -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
XX tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
XX also relates to a method of screening a candidate compound that binds to
XX one or more nucleic acid target(s) or expressed product(s), for the
XX prevention and/or treatment of a respiratory or lung disease. The
XX oligonucleotides are useful for reducing or inhibiting expression of a
XX gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
XX CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
XX tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
XX useful for preventing or treating a respiratory or lung disease. The
XX respiratory or lung disease is associated with hyper-responsiveness to
XX and/or increased levels of, adenosine and/or levels of adenosine A
XX receptor(s), and/or asthma and/or lung allergies associated with
XX inflammation or an inflammatory disease. The respiratory or lung disease
XX is chosen from airway inflammation, allergy, asthma, impeded respiration,
XX cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
XX allergic rhinitis, acute respiratory distress syndrome, pulmonary
XX hypertension, lung inflammation, bronchitis, airway obstruction or
XX bronchoconstriction. This sequence represents an oligonucleotide of the
XX invention.
XX
XX Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 1.3e+03;
XX Mismatches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1601 CCTCCAGAGTCATCCA 1619
XX 1 CCTCCAGAGTCATCCA 19
XX
RESULT 1114
AD051745
ID ADO51745 standard; DNA; 20 BP.
XX

```


FT modified_base 16..20
FT /mod_base= c
FT /*tag= c
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX US2004097451-A1.
XX
PD 20-MAY-2004.
XX
XX 19-NOV-2002; 2002US-00300611.
XX
XX 19-NOV-2002; 2002US-00300611.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Chiang M, Dobie KW;
XX WPI; 2004-389192/36.
XX
XX New compounds, particularly oligonucleotides targeted to a nucleic acid
PT encoding nidogen, useful for treating diseases associated with nidogen,
PT e.g. Chediak-Higashi syndrome.
XX
XX Example 15; SEQ ID NO 64; 91pp; English.
XX
XX The invention relates to antisense oligonucleotides which are targeted
CC to, and inhibit the expression of, a nucleic acid molecule encoding
CC nidogen. The antisense oligonucleotides are useful for treating a disease
CC or condition associated with nidogen, such as Chediak-Higashi syndrome.
CC They are also useful in research and diagnostics for modulating the
CC expression of nidogen. The present sequence represents a human nidogen
CC antisense oligonucleotide of the invention.
XX
XX Sequence 20 BP; 8 A; 2 C; 2 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.3%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2822 GTATATATACATATATATA 2840
DB 2 GTACATATACATATATGTA 20
RESULT 1117
ADP10746
ID ADP10746 standard; DNA; 20 BP.
XX
XX ADP10746;
XX
XX 12-AUG-2004 (first entry)
XX
XX Set 1 left PCR primer for marker probe #91.
XX
XX transplant rejection; immune system; rheumatoid arthritis; lupus;
KW inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
XX
XX Homo sapiens.
XX
XX WO2004042346-A2.
XX
XX 21-MAY-2004.
XX
XX 24-APR-2003; 2003WO-US012946.
XX
XX 24-APR-2002; 2002US-00131831.
XX
XX 20-DEC-2002; 2002US-00325899.
XX
XX (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX
XX Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
PI Rosenberg S;
XX

DR WPI; 2004-400724/37.
XX
XX Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
PT rejection, in an individual, comprises detecting the expression level of
PT the genes.
XX
XX Claim 58; SEQ ID NO 755; 1762pp; English.
XX
XX The present invention relates to diagnosing or monitoring transplant
CC rejection, e.g. cardiac or kidney transplant rejection, in an individual
CC comprising detecting the expression level of one or more genes. The
CC methods, system and kits are useful in diagnosing or monitoring
CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
CC islet, lung, bone marrow or stem cell transplant rejection,
CC xenotransplant rejection or mechanical organ replacement rejection, in an
CC individual. The method is also useful in assessing the immune status of
CC diseases that involve the immune system, e.g. rheumatoid arthritis,
CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
CC viral, bacterial or fungal infection. The present sequence represents a
CC primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
CC of allograft rejection and other disorders.
XX
XX Sequence 20 BP; 0 A; 3 C; 8 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.3e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2320 TGTGTGTGTGTGTGTGTGTGT 2338
DB 1 TGTGTGTGTGTGTGTGTGTGT 19
RESULT 1118
ADP44428
ID ADP44428 standard; DNA; 20 BP.
XX
XX ADP44428;
XX
XX 09-SEP-2004 (first entry)
XX
XX Human ABCC5 DNA antisense oligonucleotide #44.
XX
XX Human; ABCC5; ss; antisense oligonucleotide; phosphorothioate linkage;
KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KW hyperproliferative disorder; cancer; cytostatic.
XX
XX Homo sapiens.
XX
XX OS
XX US2004115649-A1.
XX
XX 17-JUN-2004.
XX
XX 12-DEC-2002; 2002US-00319893.
XX
XX 12-DEC-2002; 2002US-00319893.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
XX
XX WPI; 2004-449386/42.
XX
XX New oligonucleotide compound that inhibits expression of ABCC5, useful
PT for preparing a composition for treating hyperproliferative disorder,
PT e.g., cancer.
XX
XX Example 15; SEQ ID NO 54; 57pp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
CC encoding the human ABCC5 polypeptide. The compound is an antisense

| | | | | |
|----------|---|---|-------------------|----|
| ADP68433 | Db | 2 | CTCTGTATGTGTGTGCG | 20 |
| XX | ADP68433 standard; DNA; 20 BP. | | | |
| XX | ADP68433; | | | |
| XX | ADP68433; | | | |
| DT | 09-SEP-2004 (first entry) | | | |
| XX | Human STAT 6 antisense oligonucleotide IS1513790. | | | |
| DE | Human; ss; antisense; STAT 6; | | | |
| XX | signal transducer and activator of transcription; transcription factor; | | | |
| KW | rheumatoid arthritis; obesity; allergy; autoimmune disorder; | | | |
| KW | chromosome 12q13. | | | |
| XX | Homo sapiens. | | | |
| OS | Key | | | |
| XX | Location/Qualifiers | | | |
| FT | modified_base 1..20 | | | |
| FT | /*tag= b | | | |
| FT | /mod_base= OTHER | | | |
| FT | /note= "Phosphorothioate backbone and all cytidines are 5 | | | |
| FT | -methylcytidines" | | | |
| FT | modified_base 1..5 | | | |
| FT | /*tag= a | | | |
| FT | /mod_base= OTHER | | | |
| FT | /note= "2'-methoxyethyl residue" | | | |
| FT | modified_base 16..20 | | | |
| FT | /*tag= c | | | |
| FT | /mod_base= OTHER | | | |
| FT | /note= "2'-methoxyethyl residue" | | | |
| XX | US2004115634-A1. | | | |
| PN | 17-JUN-2004. | | | |
| XX | 11-DEC-2002; 2002US-00317391. | | | |
| PF | 11-DEC-2002; 2002US-00317391. | | | |
| XX | (ISIS-) ISIS PHARM INC. | | | |
| PR | Shanahan WR, Freier SM, Dobie KW; | | | |
| PA | WPI; 2004-449375/42. | | | |
| XX | New oligonucleotide compound that inhibits expression of STAT 6, useful | | | |
| XX | for preparing a composition for treating e.g. autoimmune disorders. | | | |
| PT | Example 15; SEQ ID NO 40; 64pp; English. | | | |
| PS | The invention relates to a compound (e.g. an antisense oligonucleotide), | | | |
| CC | having a sequence comprising 8-80 bp targeted to a nucleic acid encoding | | | |
| CC | STAT 6 (signal transducer and activator of transcription 6, a | | | |
| CC | transcription factor implicated in rheumatoid arthritis, obesity and | | | |
| CC | allergy), specifically hybridises with the nucleic acid encoding STAT 6 | | | |
| CC | appearing as ADP68397 and inhibits expression of STAT 6. Also included | | | |
| CC | are a method of inhibiting the expression of STAT 6 in cells or tissues, | | | |
| CC | a method of screening for a modulator of STAT 6, a diagnostic method for | | | |
| CC | identifying a disease state, a kit or assay device comprising the | | | |
| CC | compound and a method of treating an animal having a disease or condition | | | |
| CC | associated with STAT 6. The oligonucleotide compound is useful for | | | |
| CC | preparing a composition for treating autoimmune disorder, rheumatoid | | | |
| CC | arthritis, allergy or obesity. The gene for STAT 6 is located on | | | |
| CC | chromosome 12q13. The present sequence is an antisense oligonucleotide | | | |
| CC | targeting STAT 6. | | | |
| XX | Sequence 20 BP; 1 A; 3 C; 8 G; 8 T; 0 U; 0 Other; | | | |
| SQ | Query Match 0.4%; Score 15.8; DB 1; Length 20; | | | |
| | Best Local Similarity 89.5%; Pred. No. 1.3e+03; | | | |
| | Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0; | | | |
| QY | 2317 CTGTGTGTGTGTGTGCG 2335 | | | |

| | | | |
|-------------|--|-------------------|----|
| Db | 2 | CTCTGTATGTGTGTGCG | 20 |
| RESULT 1122 | | | |
| AAQ20036/C | | | |
| ID | AAQ20036 standard; DNA; 21 BP. | | |
| XX | AAQ20036; | | |
| XX | 01-APR-1992 (first entry) | | |
| DT | Cross-linking oligomer 218 for targeting human TNF. | | |
| XX | deoxyribonucleic acid; major groove; ethanoamino group; | | |
| KW | aziridinylcytosine; cross-linking group; tumour necrosis factor; ss. | | |
| XX | Synthetic. | | |
| OS | Key | | |
| XX | Location/Qualifiers | | |
| FT | modified_base 1 | | |
| FT | /*tag= a | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "N-methyl-8-oxo-2'-deoxyadenine" | | |
| FT | modified_base 2 | | |
| FT | /*tag= b | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "N-methyl-8-oxo-2'-deoxyadenine" | | |
| FT | modified_base 3 | | |
| FT | /*tag= c | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "N-methyl-8-oxo-2'-deoxyadenine" | | |
| FT | modified_base 4 | | |
| FT | /*tag= d | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "N-methyl-8-oxo-2'-deoxyadenine" | | |
| FT | modified_base 7 | | |
| FT | /*tag= e | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "N-methyl-8-oxo-2'-deoxyadenine" | | |
| FT | modified_base 9 | | |
| FT | /*tag= f | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "N-methyl-8-oxo-2'-deoxyadenine" | | |
| FT | modified_base 11 | | |
| FT | /*tag= g | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "N-methyl-8-oxo-2'-deoxyadenine" | | |
| FT | modified_base 13 | | |
| FT | /*tag= h | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "N-methyl-8-oxo-2'-deoxyadenine" | | |
| FT | modified_base 15 | | |
| FT | /*tag= i | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "N-methyl-8-oxo-2'-deoxyadenine" | | |
| FT | modified_base 17 | | |
| FT | /*tag= j | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "N-methyl-8-oxo-2'-deoxyadenine" | | |
| FT | modified_base 21 | | |
| FT | /*tag= k | | |
| FT | /mod_base= OTHER | | |
| FT | /note= "N4N4-ethanocytosine" | | |
| XX | WO9118997-A. | | |
| PN | 12-DEC-1991. | | |
| XX | 25-MAY-1990; 90US-00529346. | | |
| XX | 25-MAY-1990; 90US-00529346. | | |
| PR | 14-JAN-1991; 91US-00640654. | | |

```
XX (GILE-) GILEAD SCIE INC.
XX PA
XX PI Matteucci MD, Krawczyk S;
XX DR WPI; 1992-007480/01.
XX PT New sequence-specific non-photo-activated crosslinking agents - bind to
XX PT the major groove of duplex DNA and are esp. useful for treating latent
XX PT infections e.g. HIV.
XX PS Example 4; Page 25; 42pp; English.
XX CC The sequence is designed to target the Human tumour necrosis factor
XX CC beginning at nucleotide 1137 and to covalently cross-link to it via the
XX CC N4N4-ethanocytosine group. See also AAQ20031-Q20038
XX SQ Sequence 21 BP; 10 A; 1 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1.4e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3468 ATATCTATATATATAATTT 3486
Db 20 AAATATATATATATAATTT 2

RESULT 1123
AAQ20037/c
ID AAQ20037 standard; DNA; 21 BP.
XX AC AAQ20037;
XX DT 01-APR-1992 (first entry)
XX DE Cross-linking oligomer 219 for targeting human TNF.
XX KW deoxyribonucleic acid; major groove; ethanoamino group;
XX KW aziridinylcytosine; cross-linking group; tumour necrosis factor; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1 /*tag= a
XX FT /*mod_base= OTHER
XX FT modified_base 2 /*tag= b
XX FT /*mod_base= OTHER
XX FT modified_base 3 /*tag= c
XX FT /*mod_base= OTHER
XX FT modified_base 4 /*tag= d
XX FT /*mod_base= OTHER
XX FT modified_base 7 /*tag= e
XX FT /*mod_base= OTHER
XX FT modified_base 9 /*tag= f
XX FT /*mod_base= OTHER
XX FT modified_base 11 /*tag= g
XX FT /*mod_base= OTHER
XX FT modified_base 13 /*tag= h
XX FT /*mod_base= OTHER
XX FT modified_base 15 /*tag= i
XX FT /*mod_base= OTHER
XX FT modified_base 17 /*tag= j
XX FT /*mod_base= OTHER
XX FT modified_base 21 /*tag= k
XX FT /*mod_base= OTHER
XX FT /*note= "N-methyl-8-oxo-2'-deoxyadenine"
XX WO9118997-A.
XX PN 12-DEC-1991.
XX PD 25-MAY-1990; 90US-005293346.
XX PF 25-MAY-1990; 90US-005293346.
XX PR 14-JAN-1991; 91US-00640654.
XX PX (GILE-) GILEAD SCIE INC.
XX PA Matteucci MD, Krawczyk S;
XX PI WPI; 1992-007480/01.
XX DR New sequence-specific non-photo-activated crosslinking agents - bind to
XX XX the major groove of duplex DNA and are esp. useful for treating latent
XX XX infections e.g. HIV.
XX PS Example 4; Page 25; 42pp; English.
XX CC The sequence is designed to target the Human tumour necrosis factor
XX CC beginning at nucleotide 1137 and to covalently cross-link to it via the
XX CC N4N4-ethanocytosine groups. See also AAQ20031-Q20038
XX SQ Sequence 21 BP; 9 A; 2 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1.4e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3468 ATATCTATATATATAATTT 3486
Db 20 AAATATATATATATAATTT 2

RESULT 1124
AAQ26544
ID AAQ26544 standard; DNA; 21 BP.
XX AC AAQ26544;
XX DT 08-JAN-1993 (first entry)
XX DE PCR primer #1 for RING11 polymorphic region.
XX KW immunosuppressants; immunoenhancers; treatment; diagnosis; screening;
XX KW immune disorders; transporter peptides; proteasome complex;
XX KW MHC class I molecules; HLA; antigen processing; antigen presentation;
XX KW autoimmune disease; ankylosing spondylitis; prenatal diagnosis;
XX KW polymerase chain reaction; ss.
XX OS Synthetic.
XX PN WO9211289-A1.
XX PD 09-JUL-1992.
```

```
FT /*tag= h
FT /*mod_base= OTHER
FT /*note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 15 /*tag= i
FT /*mod_base= OTHER
FT modified_base 17 /*tag= j
FT /*mod_base= OTHER
FT modified_base 21 /*tag= k
FT /*mod_base= OTHER
FT /*note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 21 /*tag= k
FT /*mod_base= OTHER
FT /*note= "N4N4-ethanocytosine"
XX WO9118997-A.
XX PN 12-DEC-1991.
XX PD 25-MAY-1990; 90US-005293346.
XX PF 25-MAY-1990; 90US-005293346.
XX PR 14-JAN-1991; 91US-00640654.
XX PX (GILE-) GILEAD SCIE INC.
XX PA Matteucci MD, Krawczyk S;
XX PI WPI; 1992-007480/01.
XX DR New sequence-specific non-photo-activated crosslinking agents - bind to
XX XX the major groove of duplex DNA and are esp. useful for treating latent
XX XX infections e.g. HIV.
XX PS Example 4; Page 25; 42pp; English.
XX CC The sequence is designed to target the Human tumour necrosis factor
XX CC beginning at nucleotide 1137 and to covalently cross-link to it via the
XX CC N4N4-ethanocytosine groups. See also AAQ20031-Q20038
XX SQ Sequence 21 BP; 9 A; 2 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1.4e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3468 ATATCTATATATATAATTT 3486
Db 20 AAATATATATATATAATTT 2

RESULT 1124
AAQ26544
ID AAQ26544 standard; DNA; 21 BP.
XX AC AAQ26544;
XX DT 08-JAN-1993 (first entry)
XX DE PCR primer #1 for RING11 polymorphic region.
XX KW immunosuppressants; immunoenhancers; treatment; diagnosis; screening;
XX KW immune disorders; transporter peptides; proteasome complex;
XX KW MHC class I molecules; HLA; antigen processing; antigen presentation;
XX KW autoimmune disease; ankylosing spondylitis; prenatal diagnosis;
XX KW polymerase chain reaction; ss.
XX OS Synthetic.
XX PN WO9211289-A1.
XX PD 09-JUL-1992.
```

```

XX 19-DEC-1991; 91WO-GB002278.
XX 19-DEC-1990; 90GB-00027520.
PR 16-SEP-1991; 91GB-00019711.
XX (IMCR ) IMPERIAL CANCER RES TECHNOLOGY.
XX
XX Trowsdale J, Kelly AP, Glynn R, Powis SH;
XX WPI; 1992-250030/30.
XX
XX DNA encoding RING4, RING10, RING11 AND RING12 proteins - for treatment
PT and diagnosis of immune disorders and screening of new immunosuppressants
PT and immuno-enhancers.
XX
XX Example 2; Page 40; 101pp; English.
XX
XX This PCR primer was used together with AAQ26545 to amplify a 150bp
CC stretch of DNA from the RING11 gene containing a polymorphism. Sequencing
CC of the entire RING11 sequence from cDNA clones from B lymphoblastoid cell
CC lines revealed a silent single base pair mutation, and 3 single base pair
CC substitutions in the 3' region, and additional variation in the 3'
CC untranslated region. 2 of the coding sequence substitutions lead to
CC amino acid substitutions, one of which changed the putative stop codon,
CC and lengthened the protein by 17 amino acids. Causoid controls were also
CC analysed by oligonucleotide typing with probes AAQ26546-51
XX
XX Sequence 21 BP; 3 A; 4 C; 10 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1.4e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 GGATGCGACAGCGTGGTG 21
Db 3 GGATGCGACAGTGTGGTG 21

RESULT 1125
AAQ30387/c
ID AAQ30387 standard; DNA; 21 BP.
XX
XX AAQ30387;
AC
XX
XX 25-MAR-2003 (revised)
DT 07-DEC-1992 (first entry)
XX
XX Oligomer TNF218 for forming triplex with HUMTNFAA target duplex.
XX
XX Tumour necrosis factor; herpes simplex; AIDS; modified; HIV; RSV; HPV;
KW malignancy; hepatitis; inflammation; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
XX modified_base 1
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT modified_base 2
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT modified_base 3
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT modified_base 4
FT /*tag= d
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT modified_base 7

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```

FT /*tag= e
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
9 modified_base
FT /*tag= f
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
11 modified_base
FT /*tag= g
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
13 modified_base
FT /*tag= h
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
15 modified_base
FT /*tag= i
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
17 modified_base
FT /*tag= j
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
21 modified_base
FT /*tag= k
FT /mod_base= OTHER
FT /note= "OTHER= N4 N4 ethanocytosine"
XX
XX W09209705-A1.
XX
XX 11-JUN-1992.
XX
XX 25-NOV-1991; 91WO-US008811.
XX
XX 23-NOV-1990; 90US-00617907.
PR 18-JAN-1991; 91US-00643382.
PR 08-APR-1991; 91US-00683420.
PR 17-APR-1991; 91US-00686544.
PR 17-APR-1991; 91US-00686546.
PR 17-APR-1991; 91US-00686547.
PR 27-SEP-1991; 91US-00766733.
XX
XX (GILE-) GILEAD SCI INC.
XX
XX Proehler B, Krawczyk S, Matteucci MD, Milligan J;
XX WPI; 1992-217083/26.
XX
XX New oligomers contg. modified bases - which form a triplex with G-C
PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
PT herpes malignancy and inflammation.
XX
XX Claim 12; Page 70; 77pp; English.
XX
XX The synthetic oligomer is capable of forming a triplex at physiological
CC pH with a purine rich target sequence by coupling into the major groove
CC of the duplex. The specific target sequence of this oligomer is the human
CC tumour necrosis factor beginning at nucleotide 1137 contg. a purine rich
CC sequence concd. on one strand of the duplex. The oligomer, and others
CC like it are useful in diagnosis and therapy of diseases characterised by
CC specific DNA duplex targets, e.g. HPV; HER; HIV; hepatitis B, herpes,
CC malignant tumours and inflammation. The triple helices form under mild
CC conditions thus assays may be carried out without subjecting the test
CC specimen to harsh conditions. See also AAQ25452-25501 and AAQ30236-448.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
XX "SQ Sequence 21 BP; 10 A; 1 C; 0 G; 10 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1.4e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3468 ATATCTATATATATAATTT 3486

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Db      10  AATATATATATATATTT 2
RESULT 1126
AAQ30388/c
ID      AAQ30388 standard; DNA; 21 BP.
XX      AC      AAQ30388;
XX      DT      25-MAR-2003 (revised)
XX      DT      07-DEC-1992 (first entry)
XX      DE      Oligomer TNF219 for forming triplex with HUNTFFAA target duplex.
XX      KW      Tumour necrosis factor; herpes simplex; AIDS; modified; HIV; RSV; HPV;
XX      KW      malignancy; hepatitis; inflammation; ss.
XX      OS      Synthetic.
XX      PH      Key
XX      FT      modified_base 1
XX      FT      Location/Qualifiers
XX      FT      1
XX      FT      /tag= a
XX      FT      /mod_base= OTHER
XX      FT      /note= "OTHER= N4 N4 ethanocytosine"
XX      FT      modified_base 2
XX      FT      /tag= b
XX      FT      /mod_base= OTHER
XX      FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
XX      FT      modified_base 3
XX      FT      /tag= c
XX      FT      /mod_base= OTHER
XX      FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
XX      FT      modified_base 4
XX      FT      /tag= d
XX      FT      /mod_base= OTHER
XX      FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
XX      FT      modified_base 7
XX      FT      /tag= e
XX      FT      /mod_base= OTHER
XX      FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
XX      FT      modified_base 9
XX      FT      /tag= f
XX      FT      /mod_base= OTHER
XX      FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
XX      FT      modified_base 11
XX      FT      /tag= g
XX      FT      /mod_base= OTHER
XX      FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
XX      FT      modified_base 13
XX      FT      /tag= h
XX      FT      /mod_base= OTHER
XX      FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
XX      FT      modified_base 15
XX      FT      /tag= i
XX      FT      /mod_base= OTHER
XX      FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
XX      FT      modified_base 17
XX      FT      /tag= j
XX      FT      /mod_base= OTHER
XX      FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
XX      FT      modified_base 21
XX      FT      /tag= k
XX      FT      /mod_base= OTHER
XX      FT      /note= "OTHER= N4 N4 ethanocytosine"
XX      PN      WO9209705-A1.
XX      PD      11-JUN-1992.
XX      PP      25-NOV-1991; 91WO-US008811.
XX      PP      23-NOV-1990; 90US-00617907.

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PR      18-JAN-1991; 91US-00643382.
PR      08-APR-1991; 91US-00683420.
PR      17-APR-1991; 91US-00686544.
PR      17-APR-1991; 91US-00686546.
PR      17-APR-1991; 91US-00686547.
PR      27-SEP-1991; 91US-00766733.
XX      PA      (GILE-) GILEAD SCI INC.
XX      XX      Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX      XX      WPI; 1992-217083/26.
XX      XX      New oligomers contg. modified bases - which form a triplex with G-C
XX      PT      doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX      PT      herpes malignancy and inflammation.
XX      XX      Claim 12; Page 70; 77pp; English.
XX      CC      The synthetic oligomer is capable of forming a triplex at physiological
XX      CC      pH with a purine rich target sequence by coupling into the major groove
XX      CC      of the duplex. The specific target sequence of this oligomer is the human
XX      CC      tumour necrosis factor beginning at nucleotide 1137 contg. a purine rich
XX      CC      sequence concd. on one strand of the duplex. The oligomer, and others
XX      CC      like it are useful in diagnosis and therapy of diseases characterised by
XX      CC      specific DNA duplex targets, e.g. HPV; HER; HIV, hepatitis B, herpes,
XX      CC      malignant tumours and inflammation. The triple helices form under mild
XX      CC      conditions thus assays may be carried out without subjecting the test
XX      CC      specimen to harsh conditions. See also AAQ25452-25501 and AAQ30226-448.
XX      CC      (Updated on 25-MAR-2003 to correct PN field.)
XX      SQ      Sequence 21 BP; 9 A; 2 C; 0 G; 10 T; 0 U; 0 Other;
XX      Query Match 0.4%; Score 15.8; DB 1; Length 21;
XX      Best Local Similarity 89.5%; Pred. No. 1.4e+03;
XX      Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY      3468 ATATCTATATATATATTT 3486
DB      20 AATATATATATATATTT 2
RESULT 1127
AAQ61193
ID      AAT61193 standard; DNA; 21 BP.
XX      AC      AAT61193;
XX      DT      16-OCT-1997 (first entry)
XX      DE      Primer VH3 for heavy chain variable region framework region 1 cDNA.
XX      KW      Primer; polymerase chain reaction; PCR; amplification; heavy chain;
XX      KW      immunoglobulin; Ig; variable; framework; region; production; recombinant;
XX      KW      antibody; B cell; diagnosis; therapy; ss.
XX      OS      Synthetic.
XX      PH      Key
XX      FT      Location/Qualifiers
XX      FT      misc_difference 13
XX      FT      /tag= a
XX      FT      /note= "G to T ratio 7:3"
XX      PN      DE19526546-A1.
XX      PD      23-JAN-1997.
XX      PP      20-JUL-1995; 95DE-01026546.
XX      PP      20-JUL-1995; 95DE-01026546.
XX      PP      (OPEL/) OPELZ G.
XX

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PI Terress P, Welschof M;
 XX WPI; 1997-088250/09.
 XX
 XX Prodn. of recombinant antibodies - by amplification, cloning and
 PT expression of cDNA generated from B-cell mRNA.
 XX
 XX Claim 5; Page 8; 11pp; German.
 XX
 XX The present sequence is a primer for the PCR amplification of the cDNA
 CC encoding an immunoglobulin (Ig), heavy chain, variable region, framework
 CC region 1, which corresponds to residues 1-7 of the Ig sequence. The
 CC primer can be used in a novel method for the production of recombinant
 CC antibodies, comprising the selection of B cells from a lymphocyte
 CC fraction, isolation of mRNA from individual B cells, reverse
 CC transcription of the mRNA into cDNA, amplification of the cDNA by PCR and
 CC cloning and expression of the cDNA. The recombinant antibodies can be
 CC used for diagnosis and/or therapy, while the method avoids the need for
 CC intermediate separation of light and heavy chains and gene library
 CC screening
 XX
 XX Sequence 21 BP; 3 A; 3 C; 9 G; 5 T; 0 U; 1 Other;
 SQ
 Query Match 0.4%; Score 15.8; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 1.4e+03;
 Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 QY 853 GAGGAGGAGCTGTGGAGGCT 873
 DB 1 GAGGTGCAGCTGTGGAGTCT 21
 RESULT 1128
 AAV18688
 ID AAV18688 standard; DNA; 21 BP.
 XX
 XX AAV18688;
 XX
 XX 22-JUN-1998 (first entry)
 XX
 XX Human immunoglobulin G PCR primer VH3.
 XX
 XX Human; monoclonal antibody; hybridoma cell strain ITG6; hMab; IgG;
 KW antitoxin toxin; immunoglobulin G; PCR primer; ss.
 XX
 XX Synthetic.
 OS Homo sapiens.
 XX
 XX JP10014570-A.
 XX
 XX 20-JAN-1998.
 XX
 XX 05-JUL-1996; 96JP-00194095.
 XX
 XX 05-JUL-1996; 96JP-00194095.
 XX
 XX (MATSU) MATSUDA M.
 PA (MOMI) MORINAGA & CO LTD.
 XX
 XX WPI; 1998-138233/13.
 XX
 XX New cDNA encoding human monoclonal antibody - useful for production of
 PT antibody by hybridoma techniques commercially.
 XX
 XX Example 2; Page 4; 8pp; Japanese.
 XX
 XX The present sequence represents a PCR primer for IgG used in the present
 CC invention which describes a human monoclonal antibody (hMab). The cDNA
 CC encoding the hMab can be used for commercial production of the hMab. The
 CC cDNA was isolated from an antitoxin toxin human monoclonal antibody
 CC producing hybridoma cell strain ITG6
 XX
 XX Sequence 21 BP; 3 A; 3 C; 9 G; 5 T; 0 U; 1 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 1.4e+03;
 Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 QY 853 GAGGAGGAGCTGTGGAGGCT 873
 DB 1 GAGGTGCAGCTGTGGAGTCT 21
 RESULT 1129
 AAV40565/c
 ID AAV40565 standard; DNA; 21 BP.
 XX
 XX AAV40565;
 XX
 XX 21-DEC-1998 (first entry)
 XX
 XX Human TSC gene exon 1 forward primer hTSCex1A.
 XX
 XX Thiazide-sensitive Na-Cl cotransporter; TSC; hTSC gene; human;
 KW ion transport; Gitelman's syndrome; Bartter's syndrome;
 KW hypokalaemic alkalosis; hypocalciuria; hypomagnesemia; diagnosis;
 XX therapy; SSCP; primer; ss.
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX WO9829431-A1.
 XX
 XX 09-JUL-1998.
 XX
 XX 19-DEC-1997; 97WO-US023553.
 XX
 XX 31-DEC-1996; 96US-00778052.
 XX
 XX (UYVA) UNIV YALE.
 XX
 XX Lifton RP, Simon DB;
 XX
 XX WPI; 1998-388029/33.
 XX
 XX Thiazide sensitive cotransporter and ATP sensitive potassium channel
 PT genes - useful for developing products for the diagnosis and treatment of
 PT ion transport disorders, e.g. Gitelman's Syndrome or Bartter's Syndrome.
 XX
 XX Example 1; Page 51; 105pp; English.
 XX
 XX Primers hTSCex1A forward and reverse (see AAV40565 and AAV40566,
 CC respectively) are designed to amplify exon 1 of the human hTSC gene (see
 CC AAV40561) that codes for thiazide-sensitive Na-Cl cotransporter TSC (see
 CC AAV29682). The forward primer lies within an intron of hTSC, while the
 CC reverse primer lies within exon 1. 27 Sets of specific primers (see
 CC AAV40565-V40618) were used for SSCP analysis of hTSC. Amplified products
 CC were analysed for molecular variants by electrophoresis, and identified
 CC variants were sequenced. Complete linkage of Gitelman's syndrome with TSC
 CC was demonstrated. Identification of the molecular basis of Gitelman's
 CC syndrome allows for the genetic diagnosis of this disorder. The invention
 CC provides products and methods useful for diagnosis and treatment of
 CC Gitelman's syndrome and other ion transport disorders
 XX
 XX Sequence 21 BP; 2 A; 11 C; 4 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.8; DB 1; Length 21;
 Best Local Similarity 89.5%; Pred. No. 1.4e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3404 GTTTCAGGAGGCGCGG 3422
 DB 21 GTGTCCAGGAGGCGCCAG 3
 RESULT 1130

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ACC58780/c
ID ACC58780 standard; DNA; 21 BP.
XX AC
XX ACC58780;
XX DT
XX 26-AUG-2003 (first entry)
XX DE
XX Purinoreceptor P2X3 antisense oligonucleotide.
XX KW
XX Purinoreceptor; receptor; P2X3; analgesic; uropathic; antisense; ss.
XX OS
XX Synthetic.
XX PN
XX WO2003040339-A2.
XX PD
XX 15-MAY-2003.
XX PF
XX 08-NOV-2002; 2002WO-US036000.
XX PR
XX 09-NOV-2001; 2001US-0337338P.
XX PA
XX (NEUR-) NEUROMICS INC.
XX PI
XX Shuster SJ, Arvidsson UNG, Stone LS, Zhang H, Hart LV;
XX WPI; 2003-430663/40.
XX DR
XX New antisense oligonucleotide for inhibiting the production of the
XX PT purinoreceptor P2X3 and for treating pain or disorders of urine storage
XX PT and voiding, such as overactive bladder.
XX PS
XX Claim 17; Page 10; 43pp; English.
XX CC
XX The present sequence is that of an antisense oligonucleotide that is
XX CC targeted to an accessible region of P2X3 mRNA. P2X3 is a purinoreceptor
XX CC that is implicated in pain sensitivity and bladder volume reflexes. The
XX CC antisense oligonucleotide specifically hybridises within an accessible
XX CC region of the P2X3 mRNA in its native state (see also ACC58776 and
XX CC ACC58777), thereby reducing P2X3 production. Cells or tissues are
XX CC contacted with the antisense oligonucleotide, resulting in an inhibition
XX CC of pain sensory neurons, or an increase in bladder capacity. The method
XX CC can be used to alleviate pain, e.g. in patients suffering from chronic
XX CC pain, and to treat disorders of urine storage and voiding, such as
XX CC overactive bladder
XX SX
XX Sequence 21 BP; 2 A; 3 C; 8 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1.4e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 716 CTAACACCCGACAAGGA 734
Db 21 CTAACCTCACCACAAGGA 3
RESULT 1131
ADF92493/c
ID ADF92493 standard; DNA; 21 BP.
XX AC
XX ADF92493;
XX DT
XX 26-FEB-2004 (first entry)
XX DE
XX PCR primer SEQ ID 24 used to amplify bluegill sunfish DNA.
XX KW
XX oestrogen receptor; regulation; environment; bluegill sunfish; ss; PCR;
XX PR primer.
XX OS
XX Lepomis macrochirus.
XX PN
XX JP2003199580-A.
XX SX
XX Sequence 21 BP; 1 A; 2 C; 9 G; 9 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1.4e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 15-JUL-2003.
XX PF
XX 11-JAN-2002; 2002JP-00004395.
XX PR
XX 11-JAN-2002; 2002JP-00004395.
XX PA
XX (SUMO ) SUMITOMO CHEM CO LTD.
XX DR
XX WPI; 2003-819594/77.
XX DX
XX New estrogen-receptor gene derived from bluegill animal encoding estrogen
XX PT -receptor, useful for evaluating estrogen-receptor activity regulation
XX PT ability of subject.
XX XX
XX Example 2; SEQ ID NO 24; 30pp; Japanese.
XX CC
XX The invention relates to a novel gene encoding an oestrogen-receptor
XX CC protein. The invention may be useful for measuring the oestrogen-receptor
XX CC activity regulation ability of a subject and is efficient in evaluating
XX CC the oestrogen-receptor activity regulation ability of a chemical
XX CC substance in an environment. The current sequence is that of the bluegill
XX CC sunfish oestrogen-receptor-related PCR primer of the invention.
XX SX
XX Sequence 21 BP; 3 A; 11 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1.4e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 646 GTGGAGGTGAATGGCAGCA 664
Db 20 GTGGAGGTGAACGCGAGTA 2
RESULT 1132
ADH94069
ID ADH94069 standard; DNA; 21 BP.
XX AC
XX ADH94069;
XX DT
XX 22-APR-2004 (first entry)
XX DX
XX Human gene PCR primer #914.
XX DE
XX human; gene sequence; single nucleotide polymorphism; SNP;
XX KW disease diagnosis; ss; PCR; primer.
XX SX
XX Homo sapiens.
XX OS
XX JP2003174883-A.
XX PN
XX 24-JUN-2003.
XX PD
XX 11-DEC-2001; 2001JP-00377637.
XX PF
XX 11-DEC-2001; 2001JP-00377637.
XX PR
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX PA
XX WPI; 2003-819215/77.
XX DR
XX Polynucleotide for detecting single nucleotide polymorphisms existing in
XX PT human gene, contains isolated human gene having specified sequence.
XX PT
XX Claim 2; SEQ ID NO 1906; 529pp; Japanese.
XX PS
XX The invention comprises isolated human gene sequences and PCR primer
XX CC sequences which can be used to detect single nucleotide polymorphisms
XX CC (SNPs). The DNA sequences of the invention are useful for detecting SNPs
XX CC existing in human genes and for the diagnosis of human disease. The
XX CC present DNA sequence represents a human gene PCR primer of the invention.
XX SX
XX Sequence 21 BP; 1 A; 2 C; 9 G; 9 T; 0 U; 0 Other;
```

Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1.4e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2318 TGTGTGTGTGTGTGTGT 2336
DB 1 TGTGTGTGTGTGTGTGT 19

RESULT 1133
ADL96726/c
ID ADL96726 standard; DNA; 21 BP.
XX AC ADL96726;
XX DT 20-MAY-2004 (first entry)
XX DE Human androgen receptor related southern hybridisation probe, SEQ ID 8.
XX KW variant androgen receptor; reporter gene; chromosome; animal cell;
XX KW regulator; human; ss; probe.
XX OS Unidentified.
XX PN JP2004008142-A.
XX PD 15-JAN-2004.
XX PF 10-JUN-2002; 2002JP-00168252.
XX PR 10-JUN-2002; 2002JP-00168252.
XX PA (SUMO) SUMITOMO CHEM CO LTD.
XX DR WPI; 2004-113321/12.
XX PT Novel artificial animal cell expressing variant androgen receptor
PT obtained by introducing reporter gene, sequence for initiating
PT transcription to cell, useful for evaluating substance modulating
PT receptor activity.
XX PS Disclosure; SEQ ID NO 8; 61pp; Japanese.
XX CC The invention relates to a novel artificial animal cell expressing a
CC variant androgen receptor. The variant androgen receptor is obtained by
CC introducing a reporter gene, base sequence for initiating transcription,
CC to the chromosome of the animal cell, where amino acid sequence of the
CC variant androgen receptor is identical to that of a normal androgen
CC receptor and has different amino acids at positions 646, 781 or 895 of a
CC fully defined sequence of 918 amino acids as given in the specification.
CC The artificial animal cell is useful for evaluating a substance capable
CC of modulating the activity of the variant androgen receptor, which
CC involves contacting a test substance with the animal cell, measuring the
CC index value which has correlation and the expression value of the
CC reporter gene or its quantity, and evaluating the ability of substance to
CC modulate the variant androgen receptor based on the measured index value
CC and the expression value of the reporter gene or its quantity. The method
CC is useful for retrieving the substance which has the ability of
CC modulating the variant androgen receptor. The variant androgen receptor
CC is useful for screening a substance that binds with the variant androgen
CC receptor. The invention provides a method useful for estimating the
CC effectiveness of the variant androgen receptor regulator. This
CC polynucleotide sequence represents a probe used in the exemplification of
CC the invention.
XX SQ Sequence 21 BP; 5 A; 9 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1.4e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 834 GCTGTGTGTGTGTGTGTCCAGCC 852

Db 21 GCTGTGTGTGTGTGTGTCCAGCC 3

RESULT 1134
ADN96330
ID ADN96330 standard; DNA; 21 BP.
XX AC ADN96330;
XX DT 01-JUL-2004 (first entry)
XX DE Human NOVX PCR primer #93.
XX KW Human; NOVX; PCR; ss; metabolic disorder; diabetes; obesity;
KW infectious disease; anorexia; cancer; neurodegenerative disorder;
KW Alzheimer's disease; Parkinson's disease; immune disorder;
KW haematopoietic disorder; antidiabetic; anorectic; antimicrobial;
KW anabolic; eating disorder; cytostatic; neuroprotective; nootropic;
KW antiparkinsonian; antianaemic; primer.
XX OS Homo sapiens.
XX PN US2004067490-A1.
XX PD 08-APR-2004.
XX PF 06-SEP-2002; 2002US-00236392.
XX PR 07-SEP-2001; 2001US-0318120P.
PR 07-SEP-2001; 2001US-0318130P.
PR 07-SEP-2001; 2001US-0318219P.
PR 10-SEP-2001; 2001US-0318430P.
PR 12-SEP-2001; 2001US-0318765P.
PR 17-SEP-2001; 2001US-0322781P.
PR 17-SEP-2001; 2001US-0322816P.
PR 19-SEP-2001; 2001US-0323519P.
PR 20-SEP-2001; 2001US-0323631P.
PR 20-SEP-2001; 2001US-0323636P.
PR 25-SEP-2001; 2001US-0324969P.
PR 25-SEP-2001; 2001US-0325091P.
PR 26-SEP-2001; 2001US-0324990P.
PR 15-FEB-2002; 2002US-0357303P.
PR 28-FEB-2002; 2002US-0360973P.
PR 20-MAR-2002; 2002US-0366131P.
PR 25-MAR-2002; 2002US-0367753P.
PR 02-APR-2002; 2002US-0369479P.
PR 10-MAY-2002; 2002US-0379532P.
PR 17-MAY-2002; 2002US-0381664P.
PR 17-MAY-2002; 2002US-0381672P.
PR 28-MAY-2002; 2002US-0383651P.
PR 29-MAY-2002; 2002US-0384012P.
PR 19-JUN-2002; 2002US-0390155P.
XX (ZHON/) ZHONG M.
PA (LILL/) LI L.
PA (GORM/) GORMAN L.
PA (SPYT/) SPYTEK K A.
PA (KEKU/) KEKUDA R.
PA (TAUP/) TAUPIER R J.
PA (ANDE/) ANDERSON D W.
PA (VERN/) VERNET C A M.
PA (CATT/) CARTERTON E.
PA (MILL/) MILLER C B.
PA (SHEN/) SHENOV S G.
PA (PATT/) PATTURAJAN M.
PA (PENA/) PENA C E A.
PA (TCHE/) TCHERNEV V T.
PA (PADI/) PADIGARU M.
PA (GUSE/) GUSEV V Y.
PA (MALY/) MALYANKAR U M.
PA (BURG/) BURGESS C E.
PA (GERL/) GERLACH V.

(CASM/) CASMAN S J.
 PA (REG/) RIEGER D K.
 PA (GROS/) GROSSE W M.
 PA (SMIT/) SMITHSON G.
 PA (PEYM/) PEYMAN J A.
 PA (STAR/) STARLING G.
 PA (ROTH/) ROTHENBERG M E.
 PA (LARO/) LAROCHELLE W J.
 PA (SHIM/) SHIMKETS R A.
 PA (CRAB/) CRABTREE J.
 PA (RAB/) RASTELLI L.
 PA (VOSS/) VOSS E Z.
 PA (BOLD/) BOLDOG F L.
 PA (EDIN/) EDINGER S R.
 PA (MILL/) MILLET I.
 PA (MACD/) MACDOUGALL J R.
 PA (ELLE/) ELLERMAN K.
 PA (CHAP/) CHAPOVAL A.
 XX
 PI Zhong M, Li L, Gorman L, Spytek KA, Kekuda R, Taupier RJ;
 PI Anderson DM, Vernat CM, Catterton E, Miller CE, Shenoy SG;
 PI Patturajan M, Pena CE, Tchernev VT, Padigaru M, Gusev VI;
 PI Malyankar UM, Burgess CE, Gerlach V, Casman SJ, Rieger DK;
 PI Grosse WM, Smithson G, Peyman JA, Starling G, Rothenberg ME;
 PI Larochelle WJ, Shimkets RA, Crabtree J, Rastelli L, Voss EZ;
 PI Boldog FL, Edinger SR, Millet I, Macdougall JR, Ellerman K;
 PI Chapoval A;
 XX WPI; 2004-355290/33.
 XX
 XX New isolated polypeptide, useful for treating or preventing a pathology
 PT associated with the polypeptide, e.g. diabetes, infectious disease,
 PT cancer, neurodegenerative disorders or Alzheimer's disease.
 PT
 XX Example C; SEQ ID NO 393; 552pp; English.
 XX
 XX The invention relates to human NOVX polypeptides and polynucleotides. The
 CC isolated nucleic acids can be used to express the novel proteins. to
 CC detect novel mRNA or a genetic lesion in a novel gene and to modulate its
 CC activity. It can also be used in gene therapy for treating or preventing
 CC a pathology associated with the protein or nucleic acid. The disorders
 CC include metabolic disorders, diabetes, obesity, infectious diseases,
 CC anorexia, cancer, neurodegenerative disorders, Alzheimer's disease,
 CC Parkinson's disease, immune disorders and hematopoietic disorders. This
 CC sequence represents a PCR primer used in analysis of expression of a
 CC human NOVX polynucleotide of the invention.
 XX
 XX Sequence 21 BP; 1 A; 7 C; 5 G; 8 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.8; DB 1; Length 21;
 Best Local Similarity 89.5%; Pred. No. 1.4e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3554 TAGCCTGGACTGTACTCT 3572
 Db | | | | | | | | | | | | | | | | | | | | | |
 2 TGGCCTGGACTGTCTCT 20
 RESULT 1135
 ID ADJ93185 standard; DNA; 22 BP.
 XX
 AC ADJ93185;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Human G-coupled receptor protein HGPBMY30 gene probe.
 XX
 KW ds; gene; immunosuppressive; cardiac; antiinflammatory; cytostatic;
 KW anti-HIV; antirheumatic; antiarthritic; antibacterial; antiseborrheic;
 KW dermatological; antipsoriatic; neuroprotective; nootropic;
 KW antiparkinsonian; antidiabetic; ophthalmological; antiasthmatic;
 KW antidepressant; neuroleptic; hypotensive; tranquilizer; hypertensive;
 KW
 KW anorectic; metabolic; virucide; osteopathic; antiangiinal; vulnery;
 KW gene therapy; G-protein coupled receptor protein; HGPBMY30;
 KW immune disorder; cardiovascular disorder; inflammatory disorder;
 KW metabolic disorder; reproductive disorder; testicular cancer;
 KW neural disorder; endocrine disorder; gastrointestinal disorder;
 KW Alzheimer's disease; Parkinson's diseases; diabetes; dwarfism; asthma;
 KW schizophrenia; obesity; anorexia; osteoporosis; angina pectoris;
 KW myocardial infarction.
 XX
 OS Homo sapiens.
 XX
 XX WO200296946-A1.
 PN
 XX 05-DEC-2002.
 PD
 XX 30-MAY-2002; 2002WO-US017085.
 PF
 XX 30-MAY-2001; 2001US-0294411P.
 PR
 XX (BRIM) BRISTOL-MYERS SQUIBB CO.
 PA
 XX Feder JN, Mintier GA, Ramanathan C;
 PI
 XX WPI; 2003-140445/13.
 DR
 XX Novel human G-protein coupled receptor, HGPBMY30 polypeptide useful for
 PT preventing and treating e.g. immune disorders, cardiovascular disorders
 PT or inflammatory disorders.
 PT
 XX Example 5; SEQ ID NO 88; 343pp; English.
 PS
 XX The invention relates to an isolated human G-protein coupled receptor,
 CC HGPBMY30 polypeptide or a sequence having 95% identity to the above
 CC mentioned sequences. (I) is useful for preventing or treating a medical
 CC condition, selected from an immune disorder; a cardiovascular disorder;
 CC an inflammatory disorder in which G-protein coupled receptors are either
 CC directly, or indirectly, associated with the disorder; a metabolic
 CC disorder; a reproductive disorder; a male reproductive disorder;
 CC testicular cancer; a neural disorder; an endocrine disorder;
 CC gastrointestinal disorder; (I) and (II) are also useful for detecting,
 CC prognosing, preventing, treating, and/or ameliorating the diseases such
 CC as hematopoietic and pulmonary disorders, Alzheimer's, Parkinson's
 CC diseases, diabetes, dwarfism, color blindness, retinal pigmentosa,
 CC asthma, expression, schizophrenia, sleeplessness, hypertension, anxiety,
 CC stress, renal failure, acute heart failure, hypotension, obesity,
 CC anorexia, HIV infections, osteoporosis, angina pectoris, and myocardial
 CC infarction. (I) and (II) are useful for modulating signal transduction
 CC activity. (I) and (II) are useful as an inhibitor of chemotaxis, as a
 CC food additive or preservative, and for modifying the activities of (I).
 CC (I) and (II) also useful to modulate mammalian characteristics, such as
 CC body height, weight, hair color, eye color, skin, percentage of adipose
 CC tissue, pigmentation, size and shape, to change a mammal's mental state
 CC or physical state by influencing biorhythms, cardiac rhythms,
 CC depression, tendency for violence, tolerance for pain, reproductive
 CC capabilities, hormonal or endocrine levels, appetite, libido, memory,
 CC stress, or other cognitive qualities. This sequence corresponds to a
 CC probe for the novel HGPBMY30 protein.
 XX
 XX Sequence 22 BP; 5 A; 12 C; 2 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.8; DB 1; Length 22;
 Best Local Similarity 89.5%; Pred. No. 1.4e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2596 CCCTCCGACACCCAAAGCT 2614
 Db | | | | | | | | | | | | | | | | | | | | | |
 1 CCCTGCCACACCCACAGCT 19
 RESULT 1136
 ID ABL56893 standard; DNA; 30 BP.
 XX
 XX


```
PA (KANK-) KANKYO ENG CO LTD.
XX Kurane R. Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;
PI Yokomaku T;
PI WPI; 2002-195876/25.
XX
XX Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
XX their polymorphism and mutation, particularly useful in science and
XX medicine for e.g. analytical applications, disease diagnosis and
XX microbial identification.
XX
XX Example 12; Page 60; 152pp; Japanese.
XX
XX The present invention relates to nucleic acid probes, which are useful
XX for assaying nucleic acids by hybridising with a target nucleic acid, in
XX which a single-stranded oligonucleotide is labelled with a fluorescent
XX substance and a quencher in a manner that the fluorescence intensity of
XX the hybridisation reaction system is increased after completion of the
XX hybridisation but no stem loop structure is formed. The probes are useful
XX for assaying nucleic acids and their polymorphism and mutation,
XX particularly useful for e.g. analytical applications, disease diagnosis
XX and microbial identification. The present sequence was used to illustrate
XX the invention
XX
XX Sequence 30 BP; 4 A; 1 C; 0 G; 25 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.8; DB 1; Length 30;
XX Best Local Similarity 74.1%; Pred. No. 1.9e+03;
XX Matches 20; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
XX
QY 3259 AGATATTTTATTGCTTGTGCTCTTTT 3285
Db | | | | | | | | | | | | | | | | | | | |
3 ATATATTTTTTTTCTTTTCTTTT 29

RESULT 1139
ABA97621
ID ABA97621 standard; DNA; 31 BP.
XX
XX ABA97621;
XX
XX 11-APR-2002 (first entry)
XX
XX Poly j nucleotide sequence.
XX
XX ss; fluorochrome; nucleic acid probe; fluorescence.
XX
XX Unidentified.
XX
XX JP2001286300-A.
XX
XX 16-OCT-2001.
XX
XX 20-APR-2000; 2000JP-00120097.
XX
XX 20-APR-1999; 99JP-00111601.
XX
XX 24-AUG-1999; 99JP-00236666.
XX
XX 30-AUG-1999; 99JP-00242693.
XX
XX 01-FEB-2000; 2000JP-00028896.
XX
XX (BIOI-) BIOINDUSTRY KYOKAI SH.
XX
XX (KANK-) KANKYO ENG KK.
XX
XX (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.
XX
XX WPI; 2002-134193/18.
XX
XX Measurement of nucleic acids, using a nucleic acid probe and analysis of
XX the obtained data.
XX
XX Example 5; Page 17; 34pp; Japanese.
XX
XX This invention relates to a method for measuring nucleic acids using a
```

```
CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe
CC decreases the fluorescence of the fluorochrome when hybridised with a
CC target nucleic acid, the decrease in the fluorescence is measured. The
CC method can be used for measuring a target nucleic acid
XX
XX Sequence 31 BP; 4 A; 1 C; 0 G; 26 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.8; DB 1; Length 31;
XX Best Local Similarity 74.1%; Pred. No. 2e+03;
XX Matches 20; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
XX
QY 3259 AGATATTTTATTGCTTGTGCTCTTTT 3285
Db | | | | | | | | | | | | | | | | | | | |
1 ATATATTTTTTTTCTTTTCTTTT 27

RESULT 1140
AAD27124/c
ID AAD27124 standard; RNA; 37 BP.
XX
XX AAD27124;
XX
XX 09-APR-2002 (first entry)
XX
XX RNA template, (AU)3 used to direct RNA synthesis by HCV RNA polymerase.
XX
XX Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;
XX lead compound; RNA polymerase; ss.
XX
XX Unidentified.
XX
XX US6322966-B1.
XX
XX 27-NOV-2001.
XX
XX 11-MAY-1999; 99US-00309670.
XX
XX 11-MAY-1999; 99US-00309670.
XX
XX (ZHON/) ZHONG W.
XX
XX (HONG/) HONG Z.
XX
XX (LAUJ/) LAU J Y N.
XX
XX Zhong W, Hong Z, Lau JYN;
XX
XX WPI; 2002-096587/13.
XX
XX Assay system for hepatitis C virus replicase activity comprises RNA
XX template with unstable, small stemloop capable of forming copy-back
XX structure, viral non-structural protein 5B, nucleoside triphosphates,
XX buffer.
XX
XX Example 1; Fig 2A; 10pp; English.
XX
XX The present invention relates to an assay system for hepatitis C virus
XX (HCV) replicase activity. The assay system comprises an RNA template that
XX has an unstable, small stemloop at the 3' end capable of forming a copy-
XX back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP,
XX and UTP nucleoside triphosphates (NTPs), where one of the NTP is
XX radiolabelled and an assay buffer that supports replication activity of
XX NS5B. The invention also relates to the identification of optimal
XX properties of an RNA template for copy-back self-priming RNA synthesis of
XX HCV. This activity can be used to screen for anti-HCV replicase compounds
XX or to characterise the biological relevance of lead compounds. The
XX optimal RNA templates can be used for developing a system to characterise
XX HCV NS5B polymerase mechanistically and kinetically and for designing
XX small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay
XX system of the invention is useful for detecting HCV replicase activity.
XX The nucleic acid synthesised by NS5B is detected by evaluating an
XX autoradiograph of reaction products separated by gel electrophoresis. The
XX present sequence is RNA template, (AU)3 used to direct RNA synthesis by
XX RNA polymerase proteins of HCV, BVDV and poliovirus. This sequence is used
XX in the exemplification of the invention
```

```
XX SQ Sequence 37 BP; 32 A; 0 C; 2 G; 0 T; 3 U; 0 Other;
    Query Match      0.4%; Score 15.8; DB 1; Length 37;
    Best Local Similarity 74.1%; Pred. No. 2.2e+03;
    Matches 20; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 3259 AGATATTTTATTTGCTTGTGCTTTT 3285
    ||||| ||||| ||||| ||||| |||||
Db 37 ATATATTTTATTTTATTTTATTTT 11

RESULT 1141
AAV03013
ID AAV03013 standard; DNA; 41 BP.
XX
AC AAV03013;
XX
DT 17-AUG-1998 (first entry)
XX
DE Aspergillus oryzae alpha-amylase transcription factor PCR primer.
XX
KW alpha-amylase; promoter; filamentous fungi; transcription factor;
KW expression; control; production; heterologous polypeptide; medicinal;
KW industrial enzyme; PCR primer; amyR; ss.
XX
OS Synthetic.
OS Aspergillus oryzae.
XX
FN WO9801470-A1.
XX
PD 15-JAN-1998.
XX
PF 07-JUL-1997; 97WO-DK000305.
XX
PR 05-JUL-1996; 96DK-00000740.
XX
PA (NOVO ) NOVO-NORDISK AS.
XX
PI Christensen T;
XX
WPI; 1998-100998/09.
XX
Transcription factor from Aspergillus oryzae which regulates alpha-
PT amylase promoter - useful for producing heterologous proteins, especially
PT medicinal proteins or enzymes, in filamentous fungi.
XX
PS Example 1; Page 25; 64pp; English.
XX
The sequence is that of PCR primer oligodT which was used in the analysis
CC of a transcription factor (amyR) which regulates the expression of an
CC alpha-amylase promoter
XX
SQ Sequence 41 BP; 2 A; 1 C; 2 G; 36 T; 0 U; 0 Other;
    Query Match      0.4%; Score 15.8; DB 1; Length 41;
    Best Local Similarity 65.7%; Pred. No. 2.3e+03;
    Matches 23; Conservative 0; Mismatches 12; Indels 0; Gaps 0;

QY 3300 TTCTATAGGATTTTCTTCTTAGGAGATTTATTTT 3334
    ||||| ||||| ||||| ||||| |||||
Db 1 TTTTGTGAAGCTTTTATTTTATTTTATTTTATTTT 35

RESULT 1142
AAA94319/c
ID AAA94319 standard; DNA; 42 BP.
XX
AC AAA94319;
XX
DT 11-JAN-2001 (first entry)
XX
DE RNA-protein fusion oligonucleotide 43-P[CUG].

XX RNA-protein fusion; protein library; protein isolation; DNA-RNA hybrid;
KW gene cloning; ss.
XX
OS Synthetic.
XX
FT Key Location/Qualifiers
FT misc_RNA 1..13
FT /tag= a
FT /label= RNA
FT modified_base 42
FT /tag= b
FT /mod_base= OTHER
FT /note= "attached to puromycin, a peptide acceptor"
XX
PN WO200047775-A1.
XX
PD 17-AUG-2000.
XX
PF 01-FEB-2000; 2000WO-US002589.
XX
PR 09-FEB-1999; 99US-00247190.
XX
PA (GEHO ) GEN HOSPITAL CORP.
XX
PI Szostak JW, Roberts RW, Liu R;
XX
WPI; 2000-533022/48.
XX
Producing protein or DNA libraries which are useful for improving
PT existing proteins, by in vitro translating protein coding sequences to
PT produce RNA-protein fusions and incubating these protein fusions under
PT high salt conditions.
XX
PS Disclosure; Page 44; 121pp; English.
XX
The present sequence is one of a number of oligonucleotides which were
CC used for the generation of RNA-protein fusions, including fusions having
CC a myc epitope tag. The RNA-protein fusions comprise a protein covalently
CC linked to the 3' end of its own mRNA. This is accomplished by synthesis
CC and in vitro or in situ translation of an mRNA molecule with a peptide
CC acceptor attached to its 3' end. The RNA-protein fusions are incubated
CC under high salt conditions to produce a protein library. This method is
CC useful for improving or altering existing proteins, as well as for
CC isolating new proteins and nucleic acid or small molecule targets. It may
CC also be used to improve human or humanised single-chain antibodies for
CC the treatment of a number of diseases. The method is useful for the
CC isolation of proteins with specific binding properties, for screening
CC cDNA libraries and cloning new genes on the basis of protein-protein
CC interactions. Unlike prior art, the new method does not rely on
CC maintaining the integrity of an mRNA:ribosome:nascent chain ternary
CC complex, which is very fragile and is therefore of limited use. The
CC method does not rely on topological links between the protein and the
CC nucleic acid so that the information of the protein is retained and can
CC be recovered in readable, nucleic acid form
XX
SQ Sequence 42 BP; 31 A; 4 C; 6 G; 0 T; 1 U; 0 Other;
    Query Match      0.4%; Score 15.8; DB 1; Length 42;
    Best Local Similarity 74.1%; Pred. No. 2.3e+03;
    Matches 20; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 3262 TATTTATTTGCTTGTGCTTTTTCAG 3288
    ||||| ||||| ||||| ||||| |||||
Db 37 TTTTATTTTATTTTATTTTATTTTTCAG 11

RESULT 1143
AAV48091/c
ID AAV48091 standard; DNA; 43 BP.
XX
AC AAV48091;
XX
```



```

PI Housman DE, Ledley FD, Stanton VP;
XX WPI; 2001-256468/26.
XX
XX Identifying inhibitor active on conditionally essential gene (EG) subject
XX to loss of heterozygosity in cancer, useful in cancer treatment, involves
XX determining two alleles of EG and testing potential allele specific
XX inhibitor.
XX
XX Disclosure; Fig 2; 43pp; English.
XX
XX The specification describes a method for identifying inhibitors active on
XX conditionally essential genes subject to loss of heterozygosity in
XX cancer. The method involves determining two alleles of the essential
XX gene, testing potential allele specific inhibitors to determine whether
XX the inhibitor is active on at least one but less than all of alleles. The
XX inhibitors suppress either the synthesis or the biological activity of
XX the target allelic gene product. The inhibitors are useful for treating
XX or preventing cancer or other proliferative disorders in a patient. They
XX are also useful for inhibiting growth of a cell by subjecting the cell to
XX conditions such that the gene is essential and administering an inhibitor
XX active on an allele of the conditionally essential gene. Use of allele
XX specific inhibitors allows specific killing or reduction of growth of
XX cancer cells. AAF80072-AAF80115 represent the sequences around
XX polymorphism sites of various target genes
XX
XX Sequence 21 BP; 8 A; 2 C; 5 G; 5 T; 0 U; 1 Other;
XX
Query Match 0.4%; Score 15.6; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 1.4e+03;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1294 GTGAAGATGCTGAAAG 1309
DB 6 GTGAASATGCTGAAG 21
RESULT 1146
ABS58215
ID ABS58215 standard; DNA; 21 BP.
XX
XX ABS58215;
XX
XX 05-FEB-2003 (first entry)
XX
XX Sequence surrounding polymorphism target 1528.26.
XX
XX Cancer; ss; single nucleotide polymorphism; human; SNP; CEG; LOH;
XX conditionally essential gene; alternative allele; loss of heterozygosity;
XX antiproliferative treatment; DNA excision repair protein; ERCC5;
XX chromosome 13q33.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX variation 11
XX /tag= a
XX /standard_name= "Single nucleotide polymorphism"
XX
XX US2002127714-A1.
XX
XX 12-SEP-2002.
XX
XX 14-FEB-2001; 2001US-00782837.
XX
XX 19-MAR-1998; 98US-00045054.
XX
XX (VARI-) VARIAGENICS INC.
XX
XX Housman DE, Ledley FD, Stanton VP;
XX WPI; 2003-066906/06.
XX

```

Inhibitor for treating cancer, is active on allelic form of conditionally essential gene which has two alternative alleles in a population, and targets alternative alleles.

Disclosure; Fig 2; 47pp; English.

The invention relates to an inhibitor which is active on an allelic form of a conditionally essential gene (CEG) comprising at least two alternative alleles in a population, and where the inhibitor targets at least one but less than all of the alternative alleles. Also included are: (1) a method of identifying an inhibitor potentially useful for treatment of cancer, where the inhibitor is active on CEG, and where the gene is subject to loss of heterozygosity in a cancer, involves determining at least two alleles of the gene, testing potential allele specific inhibitor (AI) to determine whether potential AI is active on alleles; (2) identifying a potential patient for treatment with an inhibitor active on alleles of CEG, where the patient is suffering from cancer, involves: (a) identifying a patient heterozygous for the gene, or (b) determining whether cancer cells in the patient have undergone loss of heterozygosity (LOH) of the gene; (3) a nucleic acid probe of at least 12 nucleotides in length which is perfectly complementary to a portion of a first allelic form of CEG (but not a second), where the portion comprises a sequence variance site; and (4) selecting a patient for treatment with an antiproliferative treatment, or selecting an antiproliferative treatment for a patient suffering from a cancer, involves determining whether normal somatic cells in a potential patient are heterozygous for an essential or CEG (which reduces the sensitivity of the cells to antiproliferative treatment), where a first allelic form of the gene is more active than a second allelic form, and determining whether cancer cells of the patient have only the second allelic form of the gene, where if the somatic cells are heterozygous and the cancer cells have only the second allelic form, it is indicative that the patient is suitable for treatment with the antiproliferative treatment or the antiproliferative treatment is suitable for the patient. The methods of the invention are useful for preventing development of cancer in a patient having a precancerous condition, for treating a patient suffering from a cancer, where the patient is heterozygous for CEG, for inhibiting growth of a cell (involves subjecting the cell to conditions such that the gene is essential, and administering at least one inhibitor active on an allele of CEG). The method inhibits proliferation or kills cells which have undergone LOH of genes that are not inhibited by the drug and contain only an allelic form of the essential gene, its RNA transcript, or its protein product against which the inhibitor is targeted, under the appropriate altered conditions, recognises more than one linked sequence variances within a specific allele, and discriminates between two allelic forms due to a particular single sequence variance between allelic forms of the target gene. The present sequence shows the sequence surrounding a polymorphism in an allele of the target gene, DNA excision repair protein, ERCC5 (Chromosome 13q3)

Sequence 21 BP; 8 A; 2 C; 5 G; 5 T; 0 U; 1 Other;

Query Match 0.4%; Score 15.6; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 1.4e+03;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1294 GTGAAGATGCTGAAAG 1309
DB 6 GTGAASATGCTGAAG 21

RESULT 1147
AAQ73429
ID AAQ73429 standard; DNA; 22 BP.
XX
XX AAQ73429;
XX
XX 25-MAR-2003 (revised)
DT 05-JUN-1995 (first entry)
XX
XX Plasmid pDS56/RBSII, Sphi-TNF-alpha primer 29/MR2.
DE Human; tumour necrosis factor; TNF; TNF-a; expression; mutein; mutation;
XX

KW receptor; affinity; therapeutic; diagnostic; cancer therapy; cancer;
 KW obesity; septic shock; meningitis; PCR; amplify; ss.
 XX Synthetic.
 XX EP619372-A1.
 XX 12-OCT-1994.
 XX 17-MAR-1994; 94EP-00104154.
 XX 29-MAR-1993; 93EP-00810224.
 XX (HOFF) HOFFMANN LA ROCHE & CO AG F.
 XX Banner D, Lesselauer W, Loetscher H, Stueber D;
 XX WPI; 1994-311810/39.
 XX New human TNF-a muteins with higher affinity for p75-TNFR - useful e.g.
 XX for cancer therapy, treatment of obesity and toxic shock.
 XX Example 1; Page 35; 53pp; English.
 XX PCR primers (AAQ72427-30) used for the mutagenesis of the tumour necrosis
 CC factor-alpha (TNF-a) (AAQ73431) to produce the mutein TNFa(D143N-A145R)
 CC (AAR62479). The resultant fragments were ligated into the expression
 CC plasmid pDS56/RBSII. The expression of the wild type or mutein proteins is
 CC regulated by the lac repressor present on the plasmid pREP4. The gene
 CC encoding the protein is mutated at specific sites resulting in series of
 CC mutated proteins (AAR62464-83 and AAR63093-103). The biological
 CC activities of TNF are mediated via specific receptor of mol. wt. 55 and
 CC 75 kDa called p55-TNF-R and p75-TNF-R respectively. The mutated proteins
 CC presented have a higher affinity for the human p75-TNF receptor than for
 CC the p55-TNF receptor. The mutated proteins can be used in a variety of
 CC therapeutic or diagnostic applications including cancer therapy,
 CC treatment of obesity, septic shock or bacterial meningitis. (Updated on
 CC 25-MAR-2003 to correct PN field.)
 XX
 XX Sequence 22 BP; 3 A; 4 C; 8 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 3633 GAGTCGGGCGAGCTGTCCTTG 3654
 Db 1 GAGTCGGGCGAGCTGTCCTTG 22
 RESULT 1148
 AAQ85327/c
 ID AAQ85327 standard; DNA; 22 BP.
 XX
 XX AAQ85327;
 XX 25-MAR-2003 (revised)
 DT 21-AUG-1995 (first entry)
 XX
 XX Probe BglRI79 for rabbit globin mRNA target sequence.
 XX Acridinium ester; probe; target; rabbit globin; screening assay; ss.
 KW
 XX Synthetic.
 OS WO9503427-A2.
 PN
 XX 02-FEB-1995.
 PD
 XX 15-JUL-1994; 94WO-US008024.
 XX
 XX 19-JUL-1993; 93US-00094577.
 PR
 XX

PA (GENP-) GEN-PROBE INC.
 XX Nelson NC, Kacian DL;
 XX WPI; 1995-075251/10.
 XX Oligo:nucleotide screening assay method - to determine the ability of the
 PT oligo:nucleotide to form a hybrid with a target nucleic acid sequence.
 XX Example; Page 24; 42pp; English.
 XX An oligo probe is labeled with acridinium ester (AE) (see AAQ85320). When
 CC the probe hybridises to a target sequence so that the AE is centrally
 CC located, for example, when the target has the sequence in AAQ85329, the
 CC label (AE) is protected. In the example a target sequence in rabbit
 CC globin mRNA (AAQ85321) was used to measure hybridisation of an oligo. The
 CC targeted oligo, BglRI38-PS, contains phosphorothioate linkages. Various
 CC phosphodiester and phosphorothioate oligos were synthesised and their
 CC sequences are given in AAQ85322-Q85327. Four of the oligos were labeled
 CC with AE gps. All four phosphodiester-AE (PO-AE) probes hybridised well at
 CC 60 degrees. BglRI38-PO and phosphorothioate oligos showed the highest
 CC extent of hybridisation (97/1% and 85.3% respectively) at 37 degrees. The
 CC remaining PO-AE probes showed an ave. of only 50% hybridisation, whereas
 CC the corresp. phosphorothioate-AE (PS-AE) probes averages 16.1% under
 CC these conditions. (Updated on 25-MAR-2003 to correct PN field.)
 XX Sequence 22 BP; 7 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1803 CGCTGCTGCTTGGGTCCTG 1824
 Db 22 CTTCCAGTCCTTGGGACCTG 1
 RESULT 1149
 AAT47817/c
 ID AAT47817 standard; cDNA; 22 BP.
 XX
 XX AAT47817;
 DT 14-MAY-1997 (first entry)
 XX
 XX PCR primer, 3ml, for human tumour ANS4-derived NF2 gene.
 DE
 XX NF2; neurofibromatosis type 2; multiple tumours; nervous system;
 KW bilateral vestibular schwannoma; acoustic neuroma; cranial nerve;
 KW meningioma; lens opacity; chromosome region 22q12; tumour suppressor;
 KW merlin; moesin-erzin-radinix like protein; alternative splicing;
 KW diagnosis; cancer; neoplasia; autosomal; dominant; hereditary; PCR;
 KW polymerase chain reaction; ss.
 XX
 XX Synthetic.
 OS
 XX US5578462-A.
 PN
 XX 26-NOV-1996.
 PD
 XX 10-JAN-1994; 94US-00179738.
 PF
 XX 10-JAN-1994; 94US-00179738.
 PR
 XX (BRIM) BRISTOL-MYERS SQUIBB CO.
 PA
 XX Bianchi AB, Seizinger BR, Kley NA;
 PI
 XX WPI; 1997-020406/02.
 DR
 XX New isolated mouse and human NF2 transcript isoforms - used to develop
 PT prods. for the diagnosis and treatment of neurofibromatosis type 2
 PT diseases.

XX Disclosure; Col 14; 46pp; English.
 XX AAT47816-T47827 are PCR primers used for the isolation of the NF2
 CC (neurofibromatosis type 2) gene from various human tumours. NF2 is an
 CC autosomal, dominantly inherited disorder characterised by multiple
 CC tumours of the central nervous system, predominantly bilateral vestibular
 CC schwannomas (acoustic neuromas) of the eighth cranial nerve. Other
 CC symptoms of NF2 include cranial meningiomas, spinal nerve root
 CC schwannomas and presenile lens opacities. The NF2 gene, mapped to
 CC chromosomal region 22q12 between the loci D22S1 and D22S28, acts a tumour
 CC suppressor. The NF2 gene is alternatively spliced resulting in three
 CC different isoforms encoding three different proteins, merlin isoforms I-
 CC III, which are likely to have differing functions. Merlin stands for
 CC moesin-erin-radin like protein, so called due to substantial homology
 CC with these three proteins. The NF2 gene isoforms and proteins encoded by
 CC them, are useful in diagnosing NF2 disease. Merlin protein products act
 CC as tumour suppressors and can be used to suppress tumour growth, as can
 CC the cDNA sequence in gene therapy applications. Antibodies raised against
 CC merlin proteins are useful as tumour targeting agents
 XX
 SQ Sequence 22 BP; 4 A; 10 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 850 GCCGAGGAGGAGCTGTGGAGG 871
 |||||
 Db 22 GCTGAAGAGGAGCTGTTCAGG 1

RESULT 1150
 AAX84681
 ID AAX84681 standard; DNA; 22 BP.

XX AAX84681;
 AC
 XX
 DT 20-SEP-1999 (first entry)
 XX
 DE Primer for KDR signal transduction inducer protein coding sequence.

XX KDR signal transduction inducer protein; human; diabetic retinopathy;
 KW vascular endothelial cell growth receptor; abnormal neovascularisation;
 KW kinase insert domain-containing receptor; solid tumour proliferation;
 KW gene therapy; metastasis; chronic rheumatoid arthritis; psoriasis;
 KW retinopathy; retinopathy of prematurity; PCR primer; ss.

XX Synthetic.
 OS Homo sapiens.
 XX
 PN WO9931238-A1.

XX 24-JUN-1999.

XX 11-DEC-1998; 98WO-JP005612.

XX 12-DEC-1997; 97JP-00343474.

XX (KYOW) KYOWA HAKKO KOGYO KK.
 PA (SHIB/) SHIBUYA M.

XX Shibuya M, Yabana N;

XX WPI; 1999-405033/34.

XX KDR signal transduction inducing protein and antibodies to it.

XX Example 4; Page 66; 82pp; Japanese.

XX This sequence represents a PCR primer for DNA encoding the protein of the
 CC invention, which induces signal transduction of the vascular endothelial
 CC cell growth receptor KDR (kinase insert domain-containing receptor) by

CC binding to its intracellular domain. The protein can be used in the
 CC investigation, diagnosis and treatment (including gene therapy) of
 CC diseases in which abnormal neovascularisation takes place, such as solid
 CC tumour proliferation, metastasis, chronic rheumatoid arthritis, psoriasis
 CC and retinopathy (including diabetic retinopathy and retinopathy of
 CC prematurity). It may be used as a screen for candidate KDR signal
 CC transduction inhibitors for therapeutic use
 XX
 SQ Sequence 22 BP; 7 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1288 GTAGCGTGAGAGTGTGAAG 1309
 |||||
 Db 1 GTAGCAGTCATGATGTTGAAG 22

RESULT 1151
 AAX84680/C
 ID AAX84680 standard; DNA; 22 BP.

XX AAX84680;
 AC

XX 20-SEP-1999 (first entry)

XX Primer for KDR signal transduction inducer protein coding sequence.

XX KDR signal transduction inducer protein; human; diabetic retinopathy;
 KW vascular endothelial cell growth receptor; abnormal neovascularisation;
 KW kinase insert domain-containing receptor; solid tumour proliferation;
 KW gene therapy; metastasis; chronic rheumatoid arthritis; psoriasis;
 KW retinopathy; retinopathy of prematurity; PCR primer; ss.

XX Synthetic.
 OS Homo sapiens.

XX WO9931238-A1.

XX 24-JUN-1999.

XX 11-DEC-1998; 98WO-JP005612.

XX 12-DEC-1997; 97JP-00343474.

XX (KYOW) KYOWA HAKKO KOGYO KK.
 PA (SHIB/) SHIBUYA M.

XX Shibuya M, Yabana N;

XX WPI; 1999-405033/34.

XX KDR signal transduction inducing protein and antibodies to it.

XX Example 4; Page 65; 82pp; Japanese.

XX This sequence represents a PCR primer for DNA encoding the protein of the
 CC invention, which induces signal transduction of the vascular endothelial
 CC cell growth receptor KDR (kinase insert domain-containing receptor) by
 CC binding to its intracellular domain. The protein can be used in the
 CC investigation, diagnosis and treatment (including gene therapy) of
 CC diseases in which abnormal neovascularisation takes place, such as solid
 CC tumour proliferation, metastasis, chronic rheumatoid arthritis, psoriasis
 CC and retinopathy (including diabetic retinopathy and retinopathy of
 CC prematurity). It may be used as a screen for candidate KDR signal
 CC transduction inhibitors for therapeutic use
 XX

SQ Sequence 22 BP; 6 A; 7 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1288 GTAGCGGTGAAGATGCTGGAAG 1309
 ||||| ||||| ||||| ||||| |||||
 Db 22 GTAGCAGTCATGATGTTGAAG 1

RESULT 1152
 AA04299/c
 ID AAX04299 standard; DNA; 22 BP.
 XX
 AC AAX04299;
 XX
 DT 16-APR-1999 (first entry)
 XX
 DE Mouse neurofibromatosis type 2 PCR primer 3ml.
 XX
 KW Human; neurofibromatosis type 2; NF2; tumour suppressor; cancer;
 KW diagnosis; gene therapy; PCR primer; ss.
 XX
 OS Synthetic.
 OS Mus sp.
 XX
 PN US5872214-A.
 XX
 PD 16-FEB-1999.
 XX
 PF 04-APR-1996; 96US-00628145.
 XX
 PR 10-JAN-1994; 94US-00179738.
 XX
 PA (BRIM) BRISTOL-MYERS SQUIBB CO.
 XX
 PI Bianchi AB, Kley NA, Seizinger BR;
 XX
 DR WPI; 1999-166715/14.
 XX

Proteins from neurofibromatosis type 2 transcript isoforms - used for diagnosis or inhibition of tumors, and generation of antibodies.

PS Example; Col 14; 45pp; English.

CC The present invention describes neurofibromatosis type 2 (NF2) transcript isoforms. NF2 polynucleotides can be used for diagnosing NF2 diseases, for inhibiting growth of tumours associated with NF2 mutations (including expression from cDNA introduced in gene therapy vectors) and to raise antibodies (useful as tumour targeting agents, since specific isoforms are often tumour-specific) and as immunoassay reagents for detecting NF2-expression products. NF2 is a tumour suppressor protein, and so has anticancer activity. The present sequence represents a PCR primer for CC mouse NF2, from an example of the present invention

XX
 SQ Sequence 22 BP; 4 A; 10 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 850 GCGAGGAGGAGCTGCTGGAGG 871
 ||||| ||||| ||||| ||||| |||||
 Db 22 GCTGAAGAGGAGCTGTTGAGG 1

RESULT 1153
 AAH28492
 ID AAH28492 standard; DNA; 22 BP.
 XX
 AC AAH28492;
 XX
 DT 17-SEP-2001 (first entry)
 XX
 DE PCR primer for cDNA encoding a human cancer associated antigen.
 XX
 KW Cancer associated antigen; INGI1; tumour suppressor; cancer; vaccine;

KW PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200147959-A2.
 XX
 PD 05-JUL-2001.
 XX
 PF 29-NOV-2000; 2000WO-US042334.
 XX
 PR 30-NOV-1999; 99US-00451739.
 PR 24-OCT-2000; 2000US-00602362.
 XX
 PA (LUDW-) LUDWIG INST CANCER RES.
 PA (SLOK) SLOAN KETTERING INST CANCER RES.
 PA (CORR) CORNELL RES FOUND INC.
 XX
 PI Jager D, Stockert E, Scanlan M, Knuth A, Old L, Gure A, Chen Y;
 XX
 DR WPI; 2001-441706/47.
 XX
 PT Isolated cancer associated nucleic acid molecule identified by SEREX
 PT (serological identification of antigens by recombinant expression
 PT cloning) technique, useful in nucleic acid based therapies to treat
 PT cancer.
 XX
 PS Example 12; Page 16; 62pp; English.
 XX
 CC PCR primers AAH28492-93 were used to amplify cDNA encoding a human cancer
 CC associated antigen, which is a variant of the INGI gene. The INGI gene is
 CC a tumour suppressor gene candidate. The cancer associated antigen
 CC polynucleotides and polypeptides are useful for screening for the
 CC possible presence of a pathological condition in a subject such as
 CC cancer. The cancer associated antigen polypeptides are useful for
 CC producing vaccines

XX
 SQ Sequence 22 BP; 8 A; 7 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2608 CAAAGCTGAGCTGCAGGAAG 2629
 ||||| ||||| ||||| ||||| |||||
 Db 1 CAAAGCAGAGCTCCGAGAAG 22

RESULT 1154
 AA168502
 ID AA168502 standard; DNA; 22 BP.
 XX
 AC AA168502;
 XX
 DT 14-DEC-2001 (first entry)
 XX
 DE L. monocytogenes iap gene cluster III PCR primer iap-1047-III-R.
 XX
 KW PCR primer; iap gene; p60 protein; detection; infection; ss.
 XX
 OS Listeria monocytogenes.
 XX
 PN WO200168900-A2.
 XX
 PD 20-SEP-2001.
 XX
 PF 15-MAR-2001; 2001WO-EP002949.
 XX
 PR 15-MAR-2000; 2000DE-01012540.
 XX
 PA (VERM-) VERMICON AG.
 XX
 PI Walcher M, Wagner M, Snaidr J;
 XX

DR WPI; 2001-625966/72.
 XX Specifically detecting microorganisms in a sample, by polymerase chain
 PT reaction with reaction and competitor primers, useful for detecting
 PT subtypes of *Listeria*, in particular *Listeria monocytogenes*.
 XX Claim 10; Page 16; 32pp; German.
 XX This invention describes a novel method for specifically detecting
 CC microorganisms in a sample by Polymerase Chain Reaction (PCR) where in
 CC addition to reaction primers specific to the target organism, competition
 CC primers specific for non-target organisms are also used. The invention is
 CC used to detect microorganisms in a sample and to distinguish them from
 CC closely related microorganisms, particularly to detect infection by
 CC *Listeria* below the species level, especially *Listeria monocytogenes*. The
 CC invention allows detection of different subspecies of *Listeria* not
 CC provided by prior art. This sequence represents a PCR primer used in the
 CC amplification of the *Listeria monocytogenes* *iap* gene associated with the
 CC p60 protein described in the method of the invention
 XX
 SQ Sequence 22 BP; 1 A; 1 C; 7 G; 13 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 2328 TGTGTCGTGTGTGTGTGTG 2349
 DB 1 TGTGTCGTGTGTGTGTGTG 22
 RESULT 1155
 ABS78766
 ID ABS78766 standard; DNA; 22 BP.
 AC ABS78766;
 XX
 XX 16-DEC-2002 (first entry)
 DT
 DE Human NOVX forward primer Ag3477.
 XX Human; NOVX; human disease; NOVX-associated disorder; cancer; addiction;
 KW Hodgkin disease; Von Hippel-Lindau syndrome; Alzheimer's disease; stroke;
 KW tuberculous sclerosis; hypercalcaemia; Parkinson's disease; depression;
 KW Huntington's disease; cerebral palsy; epilepsy; Lesch-Nyhan syndrome;
 KW multiple sclerosis; ataxia-telangiectasia; leukodystrophy; anxiety; pain;
 KW obesity; Crohn's disease; osteoporosis; inflammatory bowel disease;
 KW infertility; inflammatory bowel disease; atherosclerosis; hypertension;
 KW scleroderma; haemophilia; diabetes; pancreatitis; autoimmune disease;
 KW asthma; arthritis; immunodeficiency; HIV; viral infection; neurogenesis;
 KW bacterial infection; parasitic infection; graft-versus-host disease;
 KW cell differentiation; cell proliferation; haematopoiesis; wound healing;
 KW angiogenesis; PCR; primer; 55.
 XX
 OS Homo sapiens.
 XX
 XX WO200272770-A2.
 PN
 XX
 XX 19-SEP-2002.
 PD
 XX 08-MAR-2002; 2002WO-US0007283.
 PF
 XX 08-MAR-2001; 2001US-0274281P.
 PR 09-MAR-2001; 2001US-0274849P.
 PR 12-MAR-2001; 2001US-0275235P.
 PR 13-MAR-2001; 2001US-0275579P.
 PR 14-MAR-2001; 2001US-0275601P.
 PR 20-MAR-2001; 2001US-0276000P.
 PR 20-MAR-2001; 2001US-0277239P.
 PR 20-MAR-2001; 2001US-0277327P.
 PR 20-MAR-2001; 2001US-0277338P.
 PR 21-MAR-2001; 2001US-0277791P.
 PR 22-MAR-2001; 2001US-0277833P.

PR 23-MAR-2001; 2001US-0278152P.
 PR 26-MAR-2001; 2001US-0278894P.
 PR 27-MAR-2001; 2001US-0279036P.
 PR 28-MAR-2001; 2001US-0279344P.
 PR 30-MAR-2001; 2001US-0280233P.
 PR 02-APR-2001; 2001US-0280802P.
 PR 02-MAY-2001; 2001US-0288148P.
 PR 31-MAY-2001; 2001US-0294821P.
 PR 31-OCT-2001; 2001US-0335302P.
 PR 04-DEC-2001; 2001US-0338375P.
 PR 07-MAR-2002; 2002US-00094466.
 XX (CURA-) CURAGEN CORP.
 PA
 XX Spytek KA, Vernet CA, Tchernev VT, Malyankar UM, Gerlach VL;
 PI Li L, Zerhusen BD, Patturajan M, Gusev VY, Kekuda R, Pena CEA;
 PI Zhong M, Gangolli EA, Taupier RJ;
 XX WPI; 2002-713508/77.
 DR
 XX
 PT New NOVX polypeptides and polynucleotides, useful for preventing,
 PT diagnosing or treating NOVX-associated disorders, e.g. diabetes, multiple
 PT sclerosis, atherosclerosis, cancer, infections, osteoporosis or
 PT Parkinson's disease.
 XX
 XX Example C; Page 200; 266pp; English.
 PS
 XX The present invention relates to a new polypeptide (NOVX). The NOVX
 CC polypeptide, nucleic acid and antibody are useful in the manufacture of a
 CC medicament for treating a syndrome associated with a human disease,
 CC preferably a NOVX-associated disorder. The NOVX nucleic acids,
 CC polypeptides and antibodies are useful for treating, preventing or
 CC diagnosing diseases such as cancers, Hodgkin disease, Von Hippel-Lindau
 CC syndrome, Alzheimer's disease, stroke, tuberculous sclerosis,
 CC hypercalcaemia, Parkinson's disease, Huntington's disease, cerebral
 CC palsy, epilepsy, Lesch-Nyhan syndrome, multiple sclerosis, ataxia-
 CC telangiectasia, leukodystrophies, addiction, anxiety, depression, pain,
 CC obesity, Crohn's disease, osteoporosis, inflammatory bowel disease,
 CC infertility, inflammatory bowel disease, atherosclerosis, hypertension,
 CC scleroderma, haemophilia, diabetes, pancreatitis, autoimmune disease,
 CC asthma, arthritis, immunodeficiencies, HIV, viral, bacterial or parasitic
 CC infections, or graft-versus-host disease. The nucleic acids and
 CC polypeptides may also be used as targets for the identification of small
 CC molecules that modulate or inhibit e.g. neurogenesis, cell
 CC differentiation, cell proliferation, haematopoiesis, wound healing and
 CC angiogenesis, in gene therapy, in generation of antibodies that bind
 CC immunospecifically to NOVX substances for use in therapeutic or
 CC diagnostic methods. The nucleic acids are further used as hybridisation
 CC probes, in chromosome mapping, tissue typing, preventive medicine, and
 CC pharmacogenomics. The present nucleic acid sequence represents a PCR
 CC primer that was used in the methods of the invention for amplification of
 CC human NOVX
 XX
 SQ Sequence 22 BP; 10 A; 3 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1361 TGAAGATGATCGGAACACAA 1382
 DB 1 TGAACATGTTTGGAAACACAA 22
 RESULT 1156
 ABS60863
 ID ABS60863 standard; DNA; 22 BP.
 XX
 AC ABS60863;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Human genotyping PCR primer #16.

XX Human; ss; aminopeptidase P; XPNEP2; bradykinin receptor B1; primer;
 KW BDKRB1; tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH;
 KW kallikrein 1; KLK1; bradykinin receptor B2; BDKRB2; gene therapy;
 KW angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;
 KW polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
 KW cardiovascular disease; angina pectoris; hypertension; heart failure;
 KW myocardial infarction; ventricular hypertrophy; vascular disease;
 KW aneurysm; embolism; thrombosis; coronary artery disease; angioedema;
 KW arteriosclerosis; atherosclerosis; hypersensitivity; sepsis; PCR;
 KW autoimmune disease; inflammatory arthritis; cancer; wound; genotyping;
 KW viral infection; bacterial infection; fungal infection; COPD;
 KW Chronic obstructive pulmonary disease; enterocolitis.
 XX Homo sapiens.
 XX WO200261131-A2.
 XX 08-AUG-2002.
 XX 03-DEC-2001; 2001WO-US047235.
 XX 04-DEC-2000; 2000US-025101SP.
 XX 23-JAN-2001; 2001US-0263678P.
 XX 02-MAR-2001; 2001US-0273037P.
 XX (BRIM) BRISTOL-MYERS SQUIBB CO.
 XX (TSUC/) TSUCHIHASHI Z.
 XX (HUII/) HUI L.
 XX Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;
 XX Swanson BN, Powell JR;
 XX WPI; 2002-619265/66.
 XX New isolated nucleic acid with at least one polymorphic position, useful
 XX for detecting, diagnosing and treating disorders such as angioedema,
 XX cancer, viral, bacterial or fungal infection, cardiovascular and
 XX autoimmune diseases.
 XX Example 3; Page 891; 977pp; English.
 XX The invention relates to an isolated nucleic acid from a human gene
 XX encoding aminopeptidase P (XPNEP2), bradykinin receptor B1 (BDKRB1),
 XX tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
 XX 1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
 XX 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one
 XX polymorphic position. Also included are (1) a probe that hybridises to a
 XX polymorphic position as provided in the detailed summary of single
 XX nucleotide polymorphisms comprising additional 5' and 3' flanking genomic
 XX sequence; (2) analysing (M1) at least one nucleic acid sample comprising
 XX obtaining the sample from one or more individuals and determining the
 XX nucleic acid sequence at one or more polymorphic positions in a gene
 XX encoding a protein selected from the group above; (3) constructing (M2)
 XX haplotypes using the genes comprising grouping at least two nucleic acids
 XX (4) identifying (M3) an individual at risk of developing a disorder
 XX upon administration of an ACE inhibitor and/or vasopeptidase inhibitor
 XX using the polymorphic data; (5) a library of nucleic acids, each of which
 XX comprises one or more polymorphic positions within a gene encoding a
 XX human protein selected from the group above; and (6) genotyping (M4) an
 XX individual comprising obtaining a nucleic acid sample, determining the
 XX nucleotide present in at least one polymorphic position, and comparing at
 XX least one position with a known data set. The genes, (M1, M2, M3 and M4)
 XX and compositions are useful for detecting, diagnosing, treating
 XX preventing various disorders such as angioedema and diseases which
 XX involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
 XX disease, trachoma, and cardiovascular diseases like angina pectoris,
 XX hypertension, heart failure, myocardial infarction, ventricular
 XX hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
 XX artery disease, arteriosclerosis and/or atherosclerosis, and
 XX hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
 XX arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic
 XX obstructive pulmonary disease (COPD) and enterocolitis (many other

CC diseases and disorders are listed in the specification). The
 CC polynucleotides are also useful for chromosome identification. Antibodies
 CC against the proteins may be utilised for immunophenotyping of cell lines
 CC and biological samples. The present sequence is a genotyping PCR primer
 CC for the gene encoding one of the proteins listed above
 XX
 SQ Sequence 22 BP; 3 A; 1 C; 10 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 2326 TGTGTGTGCTGTGTGTGTG 2347
 |||||
 Db 1 TGTGTGTGATGATGATGATG 22
 |||||
 RESULT 1157
 ACC69082
 ID ACC69082 standard; DNA; 22 BP.
 XX
 AC ACC69082;
 XX
 DT 10-JUL-2003 (first entry)
 XX
 DE Human HER2 receptor PCR primer SEQ ID NO:11.
 XX
 KW Epidermal growth factor receptor; tyrosine kinase receptor inhibitor;
 KW epidermal growth factor receptor inhibitor; EGFR; mammary tumour;
 KW cytostatic; PCR primer; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN BP1300146-A1.
 XX
 PD 09-APR-2003.
 XX
 PF 03-OCT-2001; 2001EP-00123700.
 XX
 PR 03-OCT-2001; 2001EP-00123700.
 XX
 PA (BOEH) BOEHRINGER INGELHEIM INT GMBH.
 XX
 PI Hilberg F, Brandstetter I, Van Meel J, Bette P, Kleemann R;
 XX
 DR WPI; 2003-365180/35.
 XX
 XX Composition for treating mammary tumors associated with aberrant tyrosine
 XX kinase receptor activity in nonhuman animals, comprises one or more
 XX substances that inhibit the aberrant activity.
 XX
 PS Example 5; Page 22; 37pp; English.
 XX
 XX The present invention describes a composition (C) for treating mammary
 XX tumours associated with aberrant tyrosine kinase receptor activity in
 XX nonhuman animals. (C) comprises one or more substances that inhibit the
 XX aberrant tyrosine kinase receptor activity. (C) has cytostatic activity.
 XX (C) can be used as a tyrosine kinase receptor inhibitor, and an epidermal
 XX growth factor receptor (EGFR) inhibitor. (C) is especially useful for
 XX treating canine mammary tumours. The present sequence represents a PCR
 XX primer for human HER2 receptor, which is used in an example from the
 XX present invention for cloning the canine HER2 receptor
 XX
 SQ Sequence 22 BP; 4 A; 4 C; 9 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1748 TCACTGGATGGCGCTGAGGC 1769
 |||||
 Db 1 TCACTGGATGGCGCTGAGGC 22
 |||||

RESULT 1158
ABZ99033/C
ID ABZ99033 standard; DNA; 22 BP.
XX AC ABZ99033;
XX DT 17-OCT-2003 (first entry)
XX DE Human PDB4A-MTA oligonucleotide sequence.
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytotatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX OS Homo sapiens.
XX PN WO200285308-A2.
XX PD 31-OCT-2002.
XX PF 23-APR-2002; 2002WO-US013135.
XX PR 24-APR-2001; 2001US-0286137P.
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX DR WPI; 2003-229219/22.
XX KW Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiqunone.
XX PS Disclosure; SEQ ID NO 14275; 872pp; English.
XX CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiqunone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytotatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiqunone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 22 BP; 5 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 1.5e+03;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1879 GACGCTTCAAGCTGCTGAGG 1900
DB 22 GTGGGCTTCAAGCTGCTGAGG 1

RESULT 1159
ABD32064/C
ID ABD32064 standard; DNA; 22 BP.
XX AC ABD32064;
XX DT 29-JUL-2004 (first entry)
XX DE Human PDB4A-MTA-derived oligonucleotide SEQ ID 14275.
XX KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytotatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX OS Homo sapiens.
XX PN WO200285309-A2.
XX PD 31-OCT-2002.
XX PF 23-APR-2002; 2002WO-US013143.
XX PR 24-APR-2001; 2001US-0286036P.
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX DR WPI; 2003-093058/08.
XX KW Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX PS Claim 15; SEQ ID NO 14275; 763pp; English.
XX CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiasthmatic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytotatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system

CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 22 BP; 5 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1879 GAGCTCTTCAAGCTGCTGAGG 1900
 Db 22 GTGGCTTCAAGCTGCTGAGG 1
 RESULT 1160
 ADG09487
 ID ADG09487 standard; DNA; 22 BP.
 XX
 AC ADG09487;
 XX
 DT 26-FEB-2004 (first entry)
 XX
 DE TNF-alpha-related gene ERK1 PCR primer SEQ ID NO:55.
 XX
 KW tumour necrosis factor; TNF; tumour necrosis factor alpha; TNF-alpha;
 KW TNF-related gene; TNF-alpha-related gene; cancer; human; PCR primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN EP1361433-A2.
 XX
 PD 12-NOV-2003.
 XX
 PF 08-APR-2003; 2003EP-00252225.
 XX
 PR 09-APR-2002; 2002JP-00107126.
 XX
 PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
 XX
 PI Yanai Y, Yamamoto S, Yamamoto K, Ikegami H;
 XX
 DR WPI; 2004-055141/06.
 XX
 PT Estimating therapeutic efficacy of tumor necrosis factor involves
 PT evaluating expression level of tumor necrosis factor-related gene in
 PT cancer cell.
 XX
 PS Example 2; SEQ ID NO 55; 56pp; English.
 XX
 CC The present invention describes a method (M1) for estimating therapeutic
 CC efficacy of tumour necrosis factor (TNF). M1 involves evaluating the
 CC expression level of a TNF-related gene in a cancer cell. Also described
 CC is a kit for estimating the therapeutic efficacy of TNF, which is used in
 CC the treatment of cancers. The kit comprises a thermostable DNA polymerase
 CC and an oligonucleotide primer comprising a DNA sequence encoding a gene
 CC chosen from a protein kinase B (Akt-1) gene, death receptor (DR3) gene,
 CC multidrug resistance-associated protein (MRP5) gene, and multidrug
 CC resistance-associated protein (MRP6) gene. The present sequence
 CC represents a PCR primer which is used in an example from the present
 CC invention.
 XX
 SQ Sequence 22 BP; 6 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 855 GGAGGAGCTGGTGGAGCTGAC 876
 Db 1 GCAGGACCTGATGAGACTGAC 22

RESULT 1161
 ADG82621
 ID ADG82621 standard; DNA; 22 BP.
 XX
 AC ADG82621;
 XX
 DT 11-MAR-2004 (first entry)
 XX
 DE bFGF gene forward PCR primer.
 XX
 KW liver growth; hepatocyte proliferation; pathological liver condition;
 KW liver damage; vascular endothelial growth factor receptor modulator;
 KW VEGFR modulator; hepatotropic; antiinflammatory; liver growth promoter;
 KW liver failure; hepatitis; liver cirrhosis; toxic liver damage;
 KW medicamentary liver damage; hepatic encephalopathy; hepatic coma;
 KW hepatic necrosis; PCR primer; ss.
 XX
 OS Synthetic.
 OS
 PN WO2003103581-A2.
 XX
 PD 18-DEC-2003.
 XX
 PF 05-JUN-2003; 2003WO-US017591.
 XX
 PR 05-JUN-2002; 2002US-0386637P.
 XX
 PA (GETH) GENENTECH INC.
 XX
 PI Ferrara N, Hillan KJ, Le Coutur J;
 XX
 DR WPI; 2004-071254/07.
 XX
 PT Promoting liver growth or promoting hepatocyte proliferation in liver of
 PT subject, treating pathological liver condition e.g. cirrhosis in subject,
 PT by administering vascular endothelial growth factor receptor modulator.
 XX
 PS Example 4; Page 43; 64pp; English.
 XX
 CC The present invention describes a method for promoting (M1) liver growth
 CC or promoting (M2) hepatocyte proliferation in the liver of a subject,
 CC treating (M3) a pathological liver condition in a subject, or protecting
 CC (M4) liver from damage in the subject due to exposure to a hepatotoxic
 CC agent, which involves administering to the subject a vascular endothelial
 CC growth factor receptor (VEGFR) modulating agent (I). Also described: (1)
 CC an article of manufacture comprising a container, composition contained
 CC within the container and a label on the container instructing uses of the
 CC composition for promoting liver growth, where the composition comprises a
 CC VEGFR modulating agent in the amount effective to promote liver growth;
 CC and (2) a kit comprising a first container, a LABEL on the first
 CC container, and a composition contained within the first container, where
 CC the composition comprises a VEGFR modulating agent in the amount
 CC effective to promote liver growth, a second container comprising a buffer
 CC and an instruction for using the kit for promoting liver growth. (I) has
 CC hepatotropic and antiinflammatory activities, and can be used as a VEGFR
 CC modulator, and a liver growth promoter. (I) can be used for promoting
 CC liver growth or hepatocyte proliferation in the liver of a subject,
 CC treating a pathological liver condition in a subject such as liver
 CC failure, hepatitis, liver cirrhosis, toxic liver damage, medicamentary
 CC liver damage, hepatic encephalopathy, hepatic coma or hepatic necrosis,
 CC or for protecting liver from damage in a subject due to exposure to
 CC hepatotoxic agent. The VEGFR modulator create a local cascade of
 CC signaling events originating in sinusoidal endothelial cells following
 CC VEGF receptor activation, which is much more potent and beneficial in
 CC promoting hepatocyte proliferation and liver growth than systemic
 CC delivery of the principal liver mitogen, hepatocyte growth factor (HGF).
 CC The present sequence is used in the exemplification of the present
 CC invention.
 XX
 SQ Sequence 22 BP; 6 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;

Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1979 CCTCCAGAGGCCACCTTCAA 2000
 ||||| ||||| ||||| ||||| |||||
 Db 1 CCTCTCAGAGACCTACGTTCAA 22

RESULT 1162
 ADH75266
 ID ADH75266 standard; DNA; 22 BP.
 AC ADH75266;
 XX
 XX 22-APR-2004 (first entry)
 DT
 XX IFN-associated gene ERK1 PCR primer, SEQ ID NO:55.
 DE
 XX Interferon therapy; cancer; viral disease; viral infection;
 KW interferon-alpha; IFN-alpha; cyclooxygenase-2 inhibitor; Cox-2 inhibitor;
 KW apoptosis induction; colon cancer; lung cancer; pancreas cancer;
 KW breast cancer; stomach cancer; liver cancer; kidney cancer;
 KW nerve cell cancer; skin cancer; muscle cancer; uterus cancer;
 KW throat cancer; hepatitis B; hepatitis C; cytostatic; virucide;
 KW cancer cell; interferon-associated gene; ERK1; real-time PCR; primer; ss.
 XX
 XX Homo sapiens.
 OS
 XX WO2004005549-A1.
 PN
 XX 15-JAN-2004.
 PD
 XX 30-JUN-2003; 2003WO-JP008296.
 PF
 XX 03-JUL-2002; 2002JP-00195147.
 PR
 XX (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
 PA
 XX Yanai Y, Yamamoto S, Yamamoto K, Yamauchi H;
 PI
 XX WPI; 2004-108824/11.
 DR
 XX Measurement of Cox-2 gene expression in cancer or virus-infected cells
 PT for estimating the therapeutic effect of an interferon in cancer and
 PT viral disease.
 PS Disclosure; SEQ ID NO 55; 90pp; Japanese.
 XX
 XX The invention relates to a method for estimating the therapeutic effect
 CC of interferon in the treatment of cancer or viral disease. The method
 CC involves determining the amount of expression of an interferon-associated
 CC gene in cancer cells or virus-infected cells. The invention also relates
 CC to drug compositions for the treatment of cancer and viral diseases
 CC containing interferon-alpha together with a cyclooxygenase-2 (Cox-2)
 CC inhibitor such as indomethacin which potentiates the apoptosis induction
 CC effect of the interferon. The method and compositions of the invention
 CC are useful in the treatment and prevention of cancers (e.g., cancer of
 CC the colon, lung, pancreas, breast, stomach, liver, kidney, nerve cell,
 CC skin, muscle, uterus and throat) and viral infections (e.g., hepatitis B
 CC and C). The present sequence represents a PCR primer used in real-time
 CC PCR to determine the amount of expression of an interferon-associated
 CC gene in cancer cells cultured in the presence of interferon-alpha.
 XX
 SQ Sequence 22 BP; 6 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 855 GGAGGAGCTGCTGGAGCTGAC 876
 ||||| ||||| ||||| ||||| |||||
 Db 1 GCAGGACCTGATGGAGCTGAC 22

RESULT 1163
 ADJ61285/c
 ID ADJ61285 standard; DNA; 22 BP.
 AC ADJ61285;
 XX
 XX 06-MAY-2004 (first entry)
 DT
 XX Oligonucleotide associated to PDE4C #351.
 DE
 XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
 KW airway inflammation; allergy; asthma; impeded respiration;
 KW cystic fibrosis; acute respiratory distress syndrome;
 KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
 KW ss.
 XX
 XX Homo sapiens.
 OS
 XX WO2004011613-A2.
 PN
 XX 05-FEB-2004.
 PD
 XX 25-JUL-2003; 2003WO-US023509.
 PF
 XX 29-JUL-2002; 2002US-0399076P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 PI
 XX WPI; 2004-203534/19.
 DR
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.
 PT initiation codons and introns of respiratory disease-relevant genes e.g.,
 PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
 PT disease e.g., asthma.
 PS Claim 2; SEQ ID NO 2141; 85pp; English.
 XX
 XX The present invention relates to an oligonucleotide anti-sense to e.g.,
 CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
 CC end of nucleic acid target comprising gene(s) chosen from e.g.
 CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
 CC oligonucleotide and optionally surfactant operatively linked to the
 CC oligonucleotide. The method is useful for preventing or treating a
 CC respiratory or lung disease, which involves administering to the airways
 CC of a subject an effective amount of an inhibitor. The oligonucleotide is
 CC useful for production of a medicament for the prevention and/or treatment
 CC of a respiratory or lung disease. The respiratory or lung disease is
 CC chosen from airway inflammation, allergy(ies), asthma, impeded
 CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
 CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
 CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
 CC obstruction. The present sequence represents an oligonucleotide of the
 CC invention.
 XX
 SQ Sequence 22 BP; 5 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1879 GAGCTCTTCAAGCTGCTGAAGG 1900
 ||||| ||||| ||||| ||||| |||||
 Db 22 GTGGGCTTCAAGCTGCTGAGG 1

RESULT 1164
 ADJ60916/c
 ID ADJ60916 standard; DNA; 22 BP.
 XX
 AC ADJ60916;

XX 06-MAY-2004 (first entry)

XX Oligonucleotide associated to PDR4A #199.

XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;

XX airway inflammation; allergy; asthma; impeded respiration;

XX cystic fibrosis; acute respiratory distress syndrome;

XX pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;

XX ss.

XX Homo sapiens.

XX WO2004011613-A2.

XX 05-FEB-2004.

XX 25-JUL-2003; 2003WO-US023509.

XX 29-JUL-2002; 2002US-0399076P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;

XX Shahabuddin S, Lu H, Cong H;

XX WPI; 2004-203534/19.

XX Novel single or multiple target oligonucleotide anti-sense to e.g.

XX initiation codons and introns of respiratory disease-relevant genes e.g.,

XX CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory

XX disease e.g., asthma.

XX Claim 2; SEQ ID NO 1772; 85pp; English.

XX The present invention relates to an oligonucleotide anti-sense to e.g.,

XX initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-

XX end of nucleic acid target comprising gene(s) chosen from e.g.

XX interleukin (IL)-4 receptor, IL-5 receptor or salts of the

XX oligonucleotide and optionally surfactant operatively linked to the

XX oligonucleotide. The method is useful for preventing or treating a

XX respiratory or lung disease, which involves administering to the airways

XX of a subject an effective amount of an inhibitor. The oligonucleotide is

XX useful for production of a medicament for the prevention and/or treatment

XX of a respiratory or lung disease. The respiratory or lung disease is

XX chosen from airway inflammation, allergy(ies), asthma, impeded

XX respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases

XX (COPD), allergic rhinitis (AR), acute respiratory distress syndrome

XX (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway

XX obstruction. The present sequence represents an oligonucleotide of the

XX invention.

XX Sequence 22 BP; 5 A; 9 C; 5 G; 3 T; 0 U; 0 Other;

XX Query Match 0.4%; Score 15.6; DB 1; Length 22;

XX Best Local Similarity 81.8%; Pred. No. 1.5e+03;

XX Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1879 GAGCTTTCAGCTGCTGAGG 1900

DB 22 GTGGGCTTCAAGCTGTGAGG 1

RESULT 1165

ID ADO46405/c

XX ADO46405 standard; DNA; 22 BP.

XX ADO46405;

XX 15-JUL-2004 (first entry)

XX Human oligonucleotide #1771.

KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;

KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;

KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;

KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;

KW asthma; lung allergy; inflammation; inflammatory disease;

KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;

KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;

KW acute respiratory distress syndrome; pulmonary hypertension;

KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.

XX Homo sapiens.

XX US2004049022-A1.

XX 11-MAR-2004.

XX 25-JUL-2003; 2003US-00627930.

XX 23-APR-2002; 2002WO-US013135.

XX 23-APR-2002; 2002WO-US013143.

XX (NYCE/) NYCE J W.

XX (SAND/) SANDRASAGRA A.

XX (TANG/) TANG L.

XX (AGUI/) AGUILAR D.

XX (MILL/) MILLER S.

XX (SHAH/) SHAHABUDDIN S.

XX (LUHH/) LU H.

XX (CONG/) CONG H.

XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;

XX Shahabuddin S, Lu H, Cong H;

XX WPI; 2004-293804/27.

XX Novel single or multiple target oligonucleotide anti-sense to e.g.

XX initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,

XX RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.

XX asthma.

XX Claim 2; SEQ ID NO 1772; 174pp; English.

XX The invention relates to oligonucleotides anti-sense to an initiation

XX codon, coding region, 5' or 3' intron-exon junction, intron or region

XX with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target

XX chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)-

XX -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,

XX tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention

XX also relates to a method of screening a candidate compound that binds to

XX one or more nucleic acid target(s) or expressed product(s), for the

XX prevention and/or treatment of a respiratory or lung disease. The

XX oligonucleotides are useful for reducing or inhibiting expression of a

XX gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,

XX CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,

XX tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are

XX useful for preventing or treating a respiratory or lung disease. The

XX respiratory or lung disease is associated with hyper-responsiveness to

XX and/or increased levels of, adenosine and/or levels of adenosine A

XX receptor(s), and/or asthma and/or lung allergies associated with

XX inflammation or an inflammatory disease. The respiratory or lung disease

XX is chosen from airway inflammation, allergy, asthma, impeded respiration,

XX cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),

XX allergic rhinitis, acute respiratory distress syndrome, pulmonary

XX hypertension, lung inflammation, bronchitis, airway obstruction or

XX bronchoconstriction. This sequence represents an oligonucleotide of the

XX invention.

XX Sequence 22 BP; 5 A; 9 C; 5 G; 3 T; 0 U; 0 Other;

XX Query Match 0.4%; Score 15.6; DB 1; Length 22;

XX Best Local Similarity 81.8%; Pred. No. 1.5e+03;

XX Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1879 GAGCTCTTCAAGCTGCTGAAGG 1900
 DB 22 GTGGGCTTCAAGCTGCTGCAGG 1

RESULT 1166
 AD046675/C
 ID ADO46675 standard; DNA; 22 BP.
 XX
 AC ADO46675;
 XX
 DT 15-JUL-2004 (first entry)
 XX
 DE Human oligonucleotide #2041.
 XX

Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5; CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a; tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease; lung disease; hyper-responsiveness; adenosine; adenosine A receptor; asthma; lung allergy; inflammation; inflammatory disease; cystic fibrosis; CF; airway inflammation; allergy; impeded respiration; cystic fibrosis; CF; chronic obstructive pulmonary disease; COPD; allergic rhinitis; acute respiratory distress syndrome; pulmonary hypertension; lung inflammation; bronchitis; airway obstruction; bronchoconstriction;
 XX
 OS Homo sapiens.
 XX
 PN US2004049022-A1.
 XX
 PD 11-MAR-2004.
 XX

25-JUL-2003; 2003US-00627930.
 PF
 XX 23-APR-2002; 2002WO-US013135.
 PR
 XX 23-APR-2002; 2002WO-US013143.
 XX

(NYCE/) NYCE J W.
 (SAND/) SANDRASAGRA A.
 (TANG/) TANG L.
 (AGUL/) AGUILAR D.
 (MILL/) MILLER S.
 (SHAH/) SHAHABUDDIN S.
 (LUHH/) LU H.
 (CONG/) CONG H.
 XX
 PI Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 XX
 DR WPI; 2004-293804/27.
 XX

Novel single or multiple target oligonucleotide anti-sense to e.g. CCR1, initiation codon, intron of respiratory disease-relevant gene e.g. CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g. asthma.
 PT
 PT
 XX
 PS Claim 2; SEQ ID NO 2141; 174pp; English.
 XX

The invention relates to oligonucleotides anti-sense to an initiation codon, coding region, 5' or 3' intron-exon junction, intron or region with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)-5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention also relates to a method of screening a candidate compound that binds to one or more nucleic acid target(s) or expressed product(s), for the prevention and/or treatment of a respiratory or lung disease. The oligonucleotides are useful for reducing or inhibiting expression of a gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are useful for preventing or treating a respiratory or lung disease. The respiratory or lung disease is associated with hyper-responsiveness to and/or increased levels of, adenosine and/or levels of adenosine A

receptor(s), and/or asthma and/or lung allergies associated with inflammation or an inflammatory disease. The respiratory or lung disease is chosen from airway inflammation, allergy, asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD), allergic rhinitis, acute respiratory distress syndrome, pulmonary hypertension, lung inflammation, bronchitis, airway obstruction or bronchoconstriction. This sequence represents an oligonucleotide of the invention.
 CC
 XX
 SQ Sequence 22 BP; 5 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
 XX

Query Match 0.4%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.5e+03;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 XX

1879 GAGCTCTTCAAGCTGCTGAAGG 1900
 DB 22 GTGGGCTTCAAGCTGCTGCAGG 1

RESULT 1167
 AD005994
 ID ADO05994 standard; DNA; 22 BP.
 XX
 AC ADO05994;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Cx43 PCR primer #1.
 XX

cerebroprotective; vasotropic; anticonvulsant; nootropic; neuroprotective; antiparkinsonian; antiapoptotic; antiaddictive; vulnary; tranquilizer; CNTF; ciliary neurotrophic factor; neuroprotection; PCR; ss; primer.
 KW
 KW
 XX
 OS Unidentified.
 XX
 PN WO2004037281-A1.
 XX
 PD 06-MAY-2004.
 XX

24-OCT-2003; 2003WO-CA001626.
 PF
 XX 24-OCT-2002; 2002US-0420681P.
 PR
 XX (UYBR-) UNIV BRITISH COLUMBIA.
 XX
 PI Ozog MA, Bechberger J, Naus C;
 XX
 DR WPI; 2004-365450/34.
 XX

Providing neuroprotection in a subject comprises administering to the subject a ciliary neurotrophic factor (CNTF) peptide or a peptide that acts as a receptor for CNTF peptide.
 PT
 PT
 XX
 PS Example A; Page 23; 77pp; English.
 XX

The present invention relates to a method of providing neuroprotection in a subject, which comprises administering to the subject a ciliary neurotrophic factor (CNTF) peptide or its biologically-active fragment or variant or a nucleic acid molecule, a CNTF peptide or its biologically-active fragment or variant and a peptide that acts as a receptor for CNTF. The method, composition and compound are useful in providing neuroprotection in a subject. The peptide having the activity of a CNTF peptide and the peptide that acts as a receptor for CNTF are useful in preparing a medicament for neuroprotection, for modulating cell degeneration or cell death, for treating or preventing a neurodegenerative disorder and for ameliorating the cytotoxic effect of a compound. The method, composition and compound are useful in treating or preventing a subject with substance abuse, trauma, stroke, ischaemia, Huntington's disease, Alzheimer's disease, Parkinson's disease, prion disease, variant Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis (ALS), olivopontocerebellar atrophy, epilepsy, seizures or hypoglycaemia


```
XX PF 16-JUN-2003; 2003WO-US018906.
XX PR 16-AUG-2002; 2002US-0404306P.
XX PR 01-NOV-2002; 2002US-0423290P.
XX PA (AGEN-) AGENSYS INC.
XX PI Raitano AB, Paris M, Challita-Eid PM, Jakobovits A, Ge W;
XX WPI; 2004-203774/19.
XX DR
XX PT New compositions having the 202P5A5 gene and encoded protein, useful for
PT diagnosing, preventing, prognosticating or treating cancer of the
PT prostate, bladder, colon, lung, ovary, breast, stomach, cervix, lymphoma,
PT bone and/or skin.
XX PS Example 1; SEQ ID NO 28; 266pp; English.
XX CC The invention relates to a composition comprising 202P5A5 proteins. The
CC composition and proteins are useful for detecting and treating cancer by
CC inhibiting the growth or viability of cancer cells. The present sequence
CC represents the human 202P5A5 cDNA synthesis primer.
XX SQ Sequence 41 BP; 3 A; 2 C; 2 G; 34 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.6; DB 1; Length 41;
Best Local Similarity 70.0%; Pred. No. 2.4e+03;
Matches 21; Conservative 0; Mismatches 9; Indels 0; Gaps 0;
QY 3256 TGAAGATATTATTGCTTTGCTTTT 3285
Db 7 TCAAGCTTTTTTTTTTTTTTTTTTTT 36
RESULT 1171
AAA37946
ID AAA37946 standard; DNA; 42 BP.
XX AC AAA37946;
XX DT 18-AUG-2000 (first entry)
XX DE DNA synthesis primer used in PTAN gene isolation.
XX KW PTAN; testis specific; prostate cancer; overexpress; chromosome 1q22;
XX OS diagnose; cancer; breast; vaccine; primer; ss.
XX PN WO200020589-A2.
XX PD 13-APR-2000.
XX PF 30-SEP-1999; 99WO-US022985.
XX PR 30-SEP-1998; 98US-0102556P.
XX PR 02-OCT-1998; 98US-0102910P.
XX PR 21-DEC-1998; 98US-0113229P.
XX PR 14-APR-1999; 99US-0129518P.
XX PA (UROC-) UROGENESYS INC.
PA (AFAR/) AFAR D E.
PA (HUBE/) HUBERT R S.
PA (RAIT/) RAITANO A B.
PA (MITC/) MITCHELL S C.
XX PI Afar DE, Hubert RS, Raitano AB, Mitchell SC;
XX WPI; 2000-317715/27.
XX PT PTAN proteins, and sequences encoding them, used for diagnosing and
PT treating cancers, especially breast and prostate cancers.
XX Example 1; Page 31; 71pp; English.
XX This sequence represents a primer used in the isolation of cDNA fragments
XX of the PTAN (testis specific protein expressed in prostate cancer) gene.
XX PTAN is expressed in 3 isoforms PTAN-1, 2, and 3. The PTAN gene is
XX located on chromosome 1q22. PTAN is overexpressed in prostate cancer, and
XX has a testis specific expression pattern in adult tissues. PTAN shows no
XX homology to any known gene. PTAN can be used in methods for the diagnosis
XX of cancer, especially prostate or breast cancer, where the normal tissue
XX samples are prostate tissue, or breast tissue, bone tissue, lymphatic
XX tissue, serum, blood, or urine. A vector containing the PTAN nucleotide
XX sequence, a vaccine composition targeting PTAN, PTAN, ribozymes specific
XX for PTAN mRNA and antisense sequences, can be used to treat cancer,
XX especially breast and prostate cancers. Cancer development can be
XX inhibited by a vaccine composition targeting PTAN
XX SQ Sequence 42 BP; 3 A; 2 C; 2 G; 35 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.6; DB 1; Length 42;
Best Local Similarity 70.0%; Pred. No. 2.4e+03;
Matches 21; Conservative 0; Mismatches 9; Indels 0; Gaps 0;
QY 3256 TGAAGATATTATTGCTTTGCTTTT 3285
Db 6 TCAAGCTTTTTTTTTTTTTTTTTTTT 35
RESULT 1172
ADL19444
ID ADL19444 standard; DNA; 42 BP.
XX AC ADL19444;
XX DT 20-MAY-2004 (first entry)
XX DE 125P5C8 gene-related cDNA synthesis primer.
XX KW 125P5C8; cancer-associated gene; cancer-associated protein; cancer;
XX OS cDNA synthesis; primer; PCR; ss.
XX PN US2003219444-A1.
XX PD 27-NOV-2003.
XX PF 13-MAR-2002; 2002US-00099460.
XX PR 14-MAR-2001; 2001US-00809638.
XX PA (FARI/) FARIS M.
PA (CHAL/) CHALLITA-EID P M.
PA (HUBE/) HUBERT R S.
PA (AFAR/) AFAR D E H.
PA (RAIT/) RAITANO A B.
PA (GEW/) GE W.
PA (MORR/) MORRISON R K.
PA (MORR/) MORRISON K J M.
PA (JAKO/) JAKOBOVITS A.
XX PI Paris M, Challita-Eid PM, Hubert RS, Afar DEH, Raitano AB, Ge W;
XX PI Morrison RK, Morrison KJM, Jakobovits A;
XX WPI; 2004-021932/02.
XX PT New composition comprising a substance that modulates the status of
XX 125P5C8 gene or a molecule that is modulated by 125P5C8, useful for
XX diagnosing or treating cancer.
XX Example 1; SEQ ID NO 714; 183pp; English.
XX The invention comprises a composition which contains a substance that can
```

CC modulate the status of 125P5C8 (125P5C8 is a novel cancer-associated
CC gene/protein) or a molecule that is modulated by 125P5C8. The
CC composition of the invention is useful for diagnosing or treating cancer.
CC The present DNA sequence represents a cDNA synthesis primer that was used
CC in an example of the invention to isolate a fragment of the 125P5C8 gene.
XX
XX Sequence 42 BP; 3 A; 2 C; 2 G; 35 T; 0 U; 0 Other;

```

Query Match      0.4%; Score 15.6; DB 1; Length 42;
Best Local Similarity 70.0%; Pred. No. 2.4e+03;
Matches 21; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

QY 3256 TGAAGATATTTTATTTGCTTTTGCTTTT 3285
      |||||
Db 6 TCAAGCTTTTTTTTTTTTTTTTTTTTTT 35
      |||||

```

RESULT 1173
ABK30223/c
ID ABK30223 standard; DNA; 48 BP.
XX
XX
AC ABK30223;
XX
XX 23-APR-2002 (first entry)
XX
XX CYP2D6 gene polymorphism detection primer #62.
DE
DE Human; CYP2D6; primer; single nucleotide polymorphism detection; SNP; ss.
KW
KW Homo sapiens.
OS
OS Synthetic.
OS
XX WO200196604-A2.
XX
XX 20-DEC-2001.
XX
XX 11-JUN-2001; 2001WO-US018912.
XX
XX 12-JUN-2000; 2000US-0210988P.
PR
XX
XX (GENI-) GENICON SCI CORP.
PA

```

Best Local Similarity 70.0%; Pred. No. 2.5e+03;
Matches 21; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

Qy 3262 TATTTATTGCTTTCTCTTTTTCAGGAG 3291
      ||||| ||| ||| ||||| |||
Db 42 TTTTITTTTTTTTTTTTTTTTTTTCTGGCG 13

```

| | |
|-------------|---|
| RESULT 1174 | |
| AAT80427/c | |
| ID | AAT80427 standard; DNA; 49 BP. |
| XX | |
| AC | AAT80427; |
| XX | |
| DT | 30-OCT-1997 (first entry) |
| XX | |
| DE | Hepatoma AS-30D Type II hexokinase promoter fragment from -3843. |
| XX | |
| KW | Response element; Z-DNA; neoplasia; hexokinase II; glycolysis; cancer; |
| XX | |
| KW | gene therapy; diabetes; tumour; rat; ss. |
| XX | |
| OS | Rattus rattus. |
| XX | |
| PN | WO9704104-A2. |
| XX | |
| PD | 06-FEB-1997. |
| XX | |
| PF | 12-JUL-1996; 96WO-US011673. |
| XX | |
| PR | 14-JUL-1995; 95US-0001199P. |
| XX | |
| PA | (UYJO) UNIV JOHNS HOPKINS. |
| XX | |
| PI | Pedersen PL, Mathupala SP, Rempel A; |
| XX | |
| DR | WPI; 1997-132643/12. |
| XX | |
| PT | New transcription regulating fragments of hexokinase II DNA contg. |
| PT | response element - and methods for diagnosis or treatment of neoplasias |
| PT | that over-express hexokinase II and for regulating glycolysis. |
| XX | |
| PS | Claim 1; Fig 11; 104pp; English. |

Qy 595 CACTGCAAGGTGTACAGTGCACACAGCCCCACATCCA 632
||| | ||||| ||||| | ||| |
Dδ 46 CACAAGAAGTGTCACACACACACACACACACACA 9
||| | ||||| ||||| | ||| |

RESULT 1175
AAX73034
ID AAX73034 standard; RNA; 17 BP.

```
XX AAX73034;
AC
XX
XX
DT 28-JUL-1999 (first entry)
XX
XX
DE Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #467.
XX
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
XX Mus sp.
OS
XX
XX WO9715662-A2.
PN
XX
XX PD 01-MAY-1997.
XX
XX PF 25-OCT-1996; 96WO-US017480.
XX
XX PR 26-OCT-1995; 95US-0005974P.
XX
XX PR 11-JAN-1996; 96US-00584040.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (CHIR ) CHIRON CORP.
XX
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX
XX WPI; 1997-259017/23.
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 137; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX SQ Sequence 17 BP; 6 A; 3 C; 5 G; 0 T; 3 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 1.2e+03;
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1609 AAGTCATCCACAGGGA 1625
Db 1 AAGUGUAUCCACAGGGA 17
|||||:|||||
|:|:|:|:|:|

RESULT 1176
AAX71492
ID AAX71492 standard; RNA; 17 BP.
XX
XX AAX71492;
AC
XX
XX DT 28-JUL-1999 (first entry)
XX
XX Human KDR VEGF receptor hammerhead ribozyme substrate #504.
DE
XX
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
XX Homo sapiens.
OS
XX
XX WO9715662-A2.
PN
XX
XX PD 01-MAY-1997.
XX
XX PF 25-OCT-1996; 96WO-US017480.
XX
XX PR 26-OCT-1995; 95US-0005974P.
XX
XX PR 11-JAN-1996; 96US-00584040.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (CHIR ) CHIRON CORP.
XX
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX
XX WPI; 1997-259017/23.
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 137; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX SQ Sequence 17 BP; 6 A; 3 C; 5 G; 0 T; 3 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 1.2e+03;
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1609 AAGTCATCCACAGGGA 1625
Db 1 AAGUGUAUCCACAGGGA 17
|||||:|||||
|:|:|:|:|:|

RESULT 1177
AAX71460
ID AAX71460 standard; RNA; 17 BP.
XX
XX AAX71460;
AC
XX
XX DT 28-JUL-1999 (first entry)
XX
XX Human KDR VEGF receptor hammerhead ribozyme substrate #472.
DE
XX
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
XX Homo sapiens.
OS
XX
XX WO9715662-A2.
PN
XX
XX PD 01-MAY-1997.
XX
XX PF 25-OCT-1996; 96WO-US017480.
XX
XX PR 26-OCT-1995; 95US-0005974P.
XX
XX PR 11-JAN-1996; 96US-00584040.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (CHIR ) CHIRON CORP.
XX
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX
XX WPI; 1997-259017/23.
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 112; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX SQ Sequence 17 BP; 2 A; 3 C; 5 G; 0 T; 7 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 1.2e+03;
Matches 10; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

QY 1798 AGTGACGCTGTCGTCCTT 1814
Db 1 AGUGACGUCUGGUCUUU 17
|||||:|||||
|:|:|:|:|:|
```

PR 11-JAN-1996; 96US-00584040.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (CHIR) CHIRON CORP.
 XX Pavco P, Meswigen J, Stinchcomb D, Escobedo J;
 PI WPI; 1997-259017/23.
 XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.
 XX Claim 4; Page 111; 218pp; English.
 XX The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient
 CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention
 XX
 SQ Sequence 17 BP; 6 A; 3 C; 5 G; 0 T; 3 U; 0 Other;
 Query Match 0.4%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 1.2e+03;
 Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 1609 AAGTGCATCCACAGGGA 1625
 DB 1 AAGUGUAUCCACAGGGA 17
 RESULT 1178
 AAV36994
 ID AAV36994 standard; DNA; 17 BP.
 XX
 AC AAV36994;
 DT 24-SEP-1998 (first entry)
 XX
 DE Nucleotide sequence of the PCR primer 15.
 XX
 KW PCR; primer; amplification; type II diabetes; agonist; antagonist;
 KW hepatic nuclear factor 4; HNF-4; HNF gene; anti-HNF antibody; insulin;
 KW diabetes mellitus; mature onset diabetes of the young; MODY; MODY1 gene;
 KW MODY3 gene; ss.
 XX
 OS Synthetic.
 XX
 PN WO9821363-A1.
 XX
 PD 22-MAY-1998.
 XX
 PF 14-NOV-1997; 97WO-US020759.
 XX
 PR 15-NOV-1996; 96US-00749430.
 XX
 PA (MILL-) MILLENNIUM PHARM INC.
 XX
 PI Glucksman AM, Thomas J;
 XX
 DR WPI; 1998-297964/26.
 XX
 XX Treating type II diabetes involving hepatic nuclear factor 4 - useful,
 PT e.g. to treat insufficient HNF expression or bioactivity, overexpression
 PT of HNF or expression of mutant HNF gene in diabetic patients.
 XX
 PS Disclosure; Page 86; 116pp; English.

XX This is the nucleotide sequence of the PCR primer used for amplification
 CC in the method of invention, involving the treatment of type II diabetes
 CC with hepatic nuclear factor 4 (HNF-4). The agonists of normal HNF
 CC bioactivity can be used to treat diabetes, e.g. to ameliorate disease
 CC symptoms involving insufficient expression of an HNF gene and/or
 CC inadequate functional HNF bioactivity in a subject. The antagonists of a
 CC disease-causing HNF bioactivity can be used to treat diabetes, e.g. to
 CC ameliorate disease symptoms involving expression of a mutant HNF gene or
 CC overexpression of a normal HNF gene. It is also useful to ameliorate
 CC disease symptoms involving a mutant (non-functional) HNF protein e.g. by
 CC administering a therapeutically effective amount of an anti-HNF antibody.
 CC Protein that binds to the mutant HNF-4 protein is useful in screening
 CC assays, e.g. to identify antagonists/agonists of an interaction between a
 CC HNF protein and a binding protein to develop drugs for disease treatment.
 CC Diabetes mellitus is a common metabolic disorder, and most cases are type
 CC II (non-insulin dependent diabetes mellitus (NIDDM)). A major genetic
 CC component is implicated, but few genes have been identified. Mature onset
 CC diabetes of the young (MODY) loci have been linked to rare early-onset
 CC forms, but genes for MODY1 and MODY3 have not been identified. HNF-4 is
 CC encoded by a gene mapping within the MODY1 locus
 XX
 SQ Sequence 17 BP; 2 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 54 GCTGCAGGTGCTGAATG 70
 DB 1 GCTGCAGGTGCTGAATG 17
 RESULT 1179
 AAV41419
 ID AAV41419 standard; DNA; 17 BP.
 XX
 AC AAV41419;
 DT 24-SEP-1998 (first entry)
 XX
 DE Nucleotide sequence of 3' PCR primer 18.
 XX
 KW PCR; primer; amplification; hepatic nuclear factor; HNF; diabetes;
 KW type II diabetes; HNF1 gene; transcription factor; insulin; ss.
 XX
 OS Synthetic.
 XX
 PN WO9821239-A2.
 XX
 PD 22-MAY-1998.
 XX
 PF 07-NOV-1997; 97WO-US020532.
 XX
 PR 12-NOV-1996; 96US-00748229.
 PR 15-NOV-1996; 96US-00749431.
 PR 04-DEC-1996; 96US-00760246.
 PR 10-JAN-1997; 97US-00782047.
 XX
 PA (MILL-) MILLENNIUM PHARM INC.
 XX
 PI Glucksman AM;
 XX
 DR WPI; 1998-297866/26.
 XX
 XX Treating type II diabetes with agent - useful for, e.g. modulating
 PT expression of hepatic nuclear factor or other diabetes-related gene.
 PT
 PS Disclosure; Page 80; 113pp; English.
 XX
 XX This is the nucleotide sequence of the PCR primer used for amplification
 CC in the method of the invention, which involves modulating the expression
 CC of hepatic nuclear factor or other diabetes related gene. The method is

CC used to treat early onset type II diabetes and defects in insulin secretion. It is based on the discovery that certain mutations in the CC HNF1 gene, encoding a transcription factor, are involved in these CC conditions

CC Sequence 17 BP; 2 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 54 GCTGACGCTGCTGAATG 70
DB 1 GCTGACGCTGCTGATG 17

RESULT 1180
AA18867 standard; RNA; 17 BP.

XX
AC AA18867;
XX
DT 19-JUN-2000 (first entry)
XX
DE Human TIE-2 substrate sequence SEQ ID NO:2093.

XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX hammerhead ribozyme; angiogenic factor; cytotostatic; antidiabetic;
XX ophthalmologic; antiinflammatory; antiarthritic; antiporiatic; ARMD;
XX dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX age related macular degeneration; inflammation; neovascular glaucoma;
XX myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX tubercous sclerosis; pot-wine stain; Sturge Weber syndrome;
XX Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

XX Homo sapiens.
OS
XX
XX WO9950403-A2.
XX
XX 07-OCT-1999.
XX
XX 24-MAR-1999; 99WO-US0006507.
XX
XX 27-MAR-1998; 98US-0079678P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX WPI; 1999-591315/50.
XX
XX Novel ribozymes for modulating the synthesis, expression and/or stability
XX of an mRNA encoding an angiogenic factors.
XX
XX Claim 56; Page 122; 305pp; English.

CC The present invention describes enzymatic cleave RNA molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AA16775 to
CC AA17167 and AA17561 to AA17623 represent ribozyme sequences for ARNT,
CC AA17168 to AA17560 and AA17623 to AA17684 represent their
CC corresponding target sequences; AA17685 to AA18385 and AA19087 to
CC AA19154 represent ribozyme sequences for Tie-2, and AA18386 to AA19086
CC and AA19155 to AA19222 represent their corresponding target sequences;
CC AA19223 to AA20361 and AA21501 to AA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AA20362 to AA21500 and
CC AA21596 to AA22475 and AA223263 to AA23342 represent ribozyme sequences;
CC AA21689 to AA22475 and AA223263 to AA23342 represent ribozyme sequences
CC for integrin subunit beta 3, and AA22476 to AA23282, AA23343 to
CC AA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or

CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tubercous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3

XX Sequence 17 BP; 3 A; 5 C; 6 G; 0 T; 3 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 1.2e+03;
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1619 ACAGGACCTGCTGCTGCC 1635
DB 1 ACAGGACCTGCTGCTGCC 17

RESULT 1181
AA176853/C
ID AAX76853 standard; DNA; 17 BP.

XX
AC AAX76853;
XX
DT 05-AUG-1999 (first entry)
XX
DE PCR primer for cloning of T66Bk gene.
XX
XX Transcription unit; MARK2 kinase; rsk3 kinase; regulatory region; T66Bk;
XX contrareptive; Responder/Distorter signalling cascade; t-Responder;
XX PCR primer; ss.
XX
XX Synthetic.
OS
XX Mus sp.
XX
XX WO9925815-A2.
XX
XX 27-MAY-1999.
XX
XX 18-NOV-1998; 98WO-EF007395.
XX
XX 18-NOV-1997; 97EP-00120190.
XX
XX 02-MAR-1998; 98EP-00103596.
XX
XX (PLAC) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
XX
XX Herrmann B, Koschorz B, Kispert A;
XX WPI; 1999-347466/29.
XX
XX Nucleic acids involved in the Responder phenotype in mice.
XX
XX Example 7; Page 59; 117pp; English.

CC This sequence is a PCR primer used in the cloning of the T66Bk gene. The
CC invention related to a nucleic acid molecule (I) comprising a
CC transcription unit encoding in its 5' portion a kinase having a homology
CC to MARK2 kinase and the 3' portion of the nucleotide sequence has a high
CC homology to rsk3 kinase. Sperm produced by transgenic creatures
CC containing (I) are useful for production of offspring. T66Bk, its
CC regulatory region, recombinant DNA, vectors, host cells, antibodies,
CC etc., are useful for the isolation of receptors on the surface of sperm
CC recognising attractants of the egg cell for the development and/or
CC production of contraceptives. They can also be used to identify chemicals
CC or biological compounds able to trigger the (premature) activation or
CC inhibition of the Responder/Distorter signalling cascade, or to identify
CC and isolate receptors and other members of the cascade that bind the
CC expression products. The methods for detecting the sperm of the
CC transgenic animal, and selecting against (I) also provide a means for
CC distorting the transmission ratio of genetic traits by altering genes of

CC the Responder/distorter signal cascade other than the t-Responder. They
 CC also allow distortion, to a non-Mendelian ratio, of the transmission of a
 CC genetic trait, i.e. determination of sex, from male mammals to their
 CC offspring by expressing during spermatogenesis/spermiogenesis a gene
 CC involved in sperm motility and/or fertilisation. The genes and proteins
 CC involved in the responder phenotype and Responder/Distorter signalling
 CC cascade, as well as the inventive methods are advantageous in breeding
 CC strategies by allowing for specific selection of genetic traits and in
 CC particular, of sex
 XX
 SQ Sequence 17 BP; 3 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1747 GTGAAGTGGATGGCGCC 1763
 |||||
 Db 17 GTGAAGTGGATGGCACC 1

RESULT 1182
 AAZ36590/c
 ID AAZ36590 standard; DNA; 17 BP.

XX
 AC AAZ36590;
 XX
 DT 22-FEB-2000 (first entry)

XX Probe hybridising to nucleotides of human c-erb-B-2 (HER-2).

XX Human; c-erb-B-2; HER-2; chromosome aberration; probe;
 KW peptide nucleic acid; haemopoietic malignancy; cancer;
 KW inborn constitutuel disease; herbicide resistance gene; ss.

XX Synthetic.
 OS Homo sapiens.
 XX
 PN WO9957309-A1.
 XX
 PD 11-NOV-1999.

XX 04-MAY-1999; 99WO-DK000245.
 XX 04-MAY-1998; 98DK-00000615.

XX (DAKO-) DAKO AS.

XX Pluzek K, Nielsen KV, Adelhorst K;

XX WPI; 2000-038821/03.

XX Detection of chromosome aberrations, used for detecting diseases and
 PT disorders, infections, and plant alterations related to e.g. herbicide
 PT resistance.

XX Example 1; Page 44; 63pp; English.

XX Oligonucleotides AAZ3562-97 represent a set of probes hybridising to the
 CC human c-erb-B-2 (HER-2) gene. The probes are used to demonstrate the
 CC method of the invention. The specification describes a method for the
 CC detection of chromosome aberrations in eukaryotic samples uses sets of
 CC peptide nucleic acid (PNA) probes in hybridisation reactions. The method
 CC comprises using at least 2 sets of hybridisation probes, where at least
 CC one set comprises one or more PNA probes capable of hybridising to
 CC specific nucleic acid sequences related to a potential aberration in a
 CC chromosome. The methods can be used for the detection of chromosome
 CC aberrations. They can be used for the diagnosis of disorders and diseases
 CC related to chromosomal aberrations or abnormalities such as e.g.
 CC haemopoietic malignancies, cancers and inborn constitutuel diseases. The
 CC method may be used for detecting viral sequences and their localization
 CC in the chromosome. In plant biology, the methods can be used for
 CC monitoring the efficiency of transferring herbicide resistance genes to a

CC plant
 XX
 SQ Sequence 17 BP; 4 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1677 AGACTTCGGGCTGGGCC 1693
 |||||
 Db 17 AGACTTCGGGCTGGCTC 1

RESULT 1183
 ABN08004
 ID ABN08004 standard; DNA; 17 BP.

XX
 AC ABN08004;
 XX
 DT 29-MAY-2002 (first entry)

XX Human GDMPL-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7996.

XX Human; genome-derived myosin-like protein 1; GDMPL-1; hGDMPL-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.

XX Homo sapiens.

XX WO200192524-A2.

XX 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.

XX 26-MAY-2000; 2000US-0207456P.

XX 21-SEP-2000; 2000US-0234687P.

XX 27-SEP-2000; 2000US-0236359P.

XX 04-OCT-2000; 2000GB-00024263.

XX 30-JAN-2001; 2001WO-US000661.

XX 30-JAN-2001; 2001WO-US000662.

XX 30-JAN-2001; 2001WO-US000663.

XX 30-JAN-2001; 2001WO-US000664.

XX 30-JAN-2001; 2001WO-US000665.

XX 30-JAN-2001; 2001WO-US000666.

XX 30-JAN-2001; 2001WO-US000667.

XX 30-JAN-2001; 2001WO-US000668.

XX 30-JAN-2001; 2001WO-US000669.

XX 30-JAN-2001; 2001WO-US000670.

XX 05-FEB-2001; 2001US-0266860P.

XX (AEOM-) AEOMICA INC.

XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;

XX WPI; 2002-179446/23.

XX New polypeptide, for raising antibodies that recognize hGDMPL-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPL-1.

XX Disclosure; SEQ ID NO 7996; 214pp; English.

XX The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPL-1). The protein and polynucleotide sequences of hGDMPL-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPL-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPL-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPL-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPL-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPL
 CC -1 proteins, as standards in assays used to determine the concentration

CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption/ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 5 A; 6 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1992 CACCTTCAAGCAGCTGG 2008
 DB 1 CACCATCAAGCAGCTGG 17
 RESULT 1184
 ID ABK90422
 AC ABK90422 standard; DNA; 17 BP.
 AC ABK90422;
 DT 05-NOV-2002 (first entry)
 DE Human UGT1A1 promoter polymorphism (TA)7 repeat region.
 DE Human; ds; UGT1A1; promoter; Gilbert's syndrome; hyperbilirubinaemia;
 KW uridine diphosphate glucuronosyltransferase; Crigler-Najjar syndrome;
 KW UGT; polymorphism detection; TA repeat; glucuronidation; irinotecan;
 KW TAS-103; xenobiotic.
 XX Homo sapiens.
 XX OS
 XX US6395481-B1.
 PN 28-MAY-2002.
 PD 16-FEB-1999; 99US-00251274.
 PF 16-FEB-1999; 99US-00251274.
 XX (ARCH-) ARCH DEV CORP.
 XX Di Rienzo A, Iyer L, Ratain MJ;
 XX WPI; 2002-588597/63.
 DR Detecting polymorphisms in uridine diphosphate glucuronosyltransferase
 XX gene promoter, useful for optimizing drug dosages for a patient,
 XX comprises determining the presence of five thymidine-adenine repeats in
 XX the promoter.
 XX Example 6; Col 11; 13pp; English.
 XX The invention relates to detecting (M1) polymorphisms in a uridine
 XX diphosphate glucuronosyltransferase (UGT) gene promoter by determining
 XX the presence of five thymidine-adenine (TA) repeats in the promoter,
 XX where the presence of the five TA repeats correlates with increased
 XX expression of the gene. The method is used for detecting polymorphisms in
 XX a UGT gene promoter, preferably a UGT 1 (UGT1A1) gene promoter. (M1) is
 XX useful for screening individuals for variation in glucuronidation
 XX activity, for optimising drug dosages for a patient, where the drugs
 XX (e.g. Irinotecan or TAS-103) are glucuronidated by UGT (preferably
 XX UGT1A1) and the activity of the drug is effected by its level of
 XX glucuronidation. The method preferably involves obtaining DNA from an

CC individual, amplifying all or part of a UGT gene promoter (UGT1A1 gene
 CC promoter) contained in the DNA and determining the number of TA repeats
 CC in the promoter. Thus the DNA being amplified comprises all or part of
 CC UGT1A1 promoter. The DNA is amplified by a polymerase chain reaction and
 CC the number of TA repeats is determined by gel electrophoresis or by
 CC sequencing the amplified DNA. The polymorphism comprises an allele
 CC consisting of five TA repeats (TA)5, six TA repeats (TA)6, or seven TA
 CC repeats (TA)7. The promoter has any one of the genotypes (TA)5/(TA)5,
 CC (TA)5/(TA)6, (TA)5/(TA)7, (TA)5/(TA)8, (TA)6/(TA)8, (TA)7/(TA)8 or
 CC (TA)8/(TA)8. (M1) is also useful for predicting an individual's
 CC sensitivity to xenobiotics that are glucuronidated by a UGT (preferably
 CC UGT1A1) gene product, the method comprising determining the number of TA
 CC repeats in a UGT gene promoter, where the number of TA repeats correlates
 CC with expression of the UGT gene, and the individual's sensitivity to
 CC xenobiotics is effected by glucuronidation activity. The methods
 CC preferably involve determining the presence of five, six or seven TA
 CC repeats in the promoter. Defects in glucuronidation is associated with
 CC Gilbert's syndrome (hyperbilirubinaemia) and Crigler-Najjar syndrome. The
 CC present sequence is the UGT1A1 promoter (TA)7 repeat region
 XX
 SQ Sequence 17 BP; 9 A; 0 C; 0 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2829 TACATATATATATATAA 2845
 DB 1 TATATATATATATATAA 17
 RESULT 1185
 ID ABK90422/C
 AC ABK90422 standard; DNA; 17 BP.
 AC ABK90422;
 XX 05-NOV-2002 (first entry)
 DT Human UGT1A1 promoter polymorphism (TA)7 repeat region.
 DE Human; ds; UGT1A1; promoter; Gilbert's syndrome; hyperbilirubinaemia;
 KW uridine diphosphate glucuronosyltransferase; Crigler-Najjar syndrome;
 KW UGT; polymorphism detection; TA repeat; glucuronidation; irinotecan;
 KW TAS-103; xenobiotic.
 XX Homo sapiens.
 XX OS
 XX US6395481-B1.
 PN 28-MAY-2002.
 PD 16-FEB-1999; 99US-00251274.
 PF 16-FEB-1999; 99US-00251274.
 XX (ARCH-) ARCH DEV CORP.
 XX Di Rienzo A, Iyer L, Ratain MJ;
 XX WPI; 2002-588597/63.
 DR Detecting polymorphisms in uridine diphosphate glucuronosyltransferase
 XX gene promoter, useful for optimizing drug dosages for a patient,
 XX comprises determining the presence of five thymidine-adenine repeats in
 XX the promoter.
 XX Example 6; Col 11; 13pp; English.
 XX The invention relates to detecting (M1) polymorphisms in a uridine
 XX diphosphate glucuronosyltransferase (UGT) gene promoter by determining
 XX the presence of five thymidine-adenine (TA) repeats in the promoter,
 XX where the presence of the five TA repeats correlates with increased
 XX expression of the gene. The method is used for detecting polymorphisms in
 XX a UGT gene promoter, preferably a UGT 1 (UGT1A1) gene promoter. (M1) is
 XX useful for screening individuals for variation in glucuronidation
 XX activity, for optimising drug dosages for a patient, where the drugs
 XX (e.g. Irinotecan or TAS-103) are glucuronidated by UGT (preferably
 XX UGT1A1) and the activity of the drug is effected by its level of
 XX glucuronidation. The method preferably involves obtaining DNA from an

| | | | |
|--|---|--|--|
| Best Local Similarity 94.1%; Pred. No. 1.2e+03; Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0; | | SQ Sequence 17 BP; 2 A; 8 C; 6 G; 1 T; 0 U; 0 Other; | |
| QY | 3462 TTATATATATCTATATA 3478 | Query Match 0.4%; Score 15.4; DB 1; Length 17; Best Local Similarity 94.1%; Pred. No. 1.2e+03; Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0; | |
| DB | 17 TTATATATATATATA 1 | | |
| RESULT 1188 | | | |
| ABV89729 | ID ABV89729 standard; DNA; 17 BP. | | |
| XX | AC ABV89729; | | |
| DT | 23-DEC-2002 (first entry) | | |
| XX | Human POSHL1 scanning oligonucleotide SEQ ID NO 442. | | |
| XX | Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene; | | |
| KW | Rho GTPase; signal transduction; gene expression; cancer; vaccine; | | |
| KW | gene therapy; transgenic; ss. | | |
| XX | OS Homo sapiens. | | |
| XX | XX EP1239051-A2. | | |
| PN | 11-SEP-2002. | | |
| XX | XX | | |
| XX | XX | | |
| XX | 28-JAN-2002; 2002BP-00001165. | | |
| XX | 30-JAN-2001; 2001WO-US000663. | | |
| PR | 30-JAN-2001; 2001WO-US000664. | | |
| PR | 30-JAN-2001; 2001WO-US000665. | | |
| PR | 30-JAN-2001; 2001WO-US000666. | | |
| PR | 30-JAN-2001; 2001WO-US000667. | | |
| PR | 30-JAN-2001; 2001WO-US000668. | | |
| PR | 30-JAN-2001; 2001WO-US000669. | | |
| PR | 30-JAN-2001; 2001WO-US000670. | | |
| PR | 23-MAY-2001; 2001US-00864761. | | |
| PR | 10-OCT-2001; 2001US-0328205P. | | |
| XX | (AEOM-) AEOMICA INC. | | |
| PA | Shannon M; | | |
| PI | WPI; 2002-684061/74. | | |
| DR | Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL | | |
| XX | -1, useful for treating disorders associated with decreased expression or | | |
| PT | activity of human POSHL1. | | |
| PT | Example 2; SEQ ID NO 442; 60pp + Sequence Listing; English. | | |
| PS | The invention relates to an isolated SH3 domain (POSH)-like signalling | | |
| XX | protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino | | |
| CC | acids (S1, AB83999), a sequence having 65% sequence identity to (S1), | | |
| CC | (S1) having 95% deviations, especially conservative substitutions or a | | |
| CC | fragment of the sequences comprising at least 8 contiguous amino acids. | | |
| CC | Human POSHL 1 is a proto-oncogene/oncogene product that functions as an | | |
| CC | adaptor protein that interacts with Rho family small GTPases as well as | | |
| CC | downstream components of the signal transduction pathway. (I) is useful | | |
| CC | for identifying a specific binding partner. (II) and nucleic acids (II) | | |
| CC | encoding (I) are useful for diagnosing, monitoring disease and treating | | |
| CC | caused by altered expression of human POSHL1 including diagnosing and | | |
| CC | treating cancer, they are useful in the development of vaccines and (II) is | | |
| CC | useful in gene therapy. (II) is useful for constructing microarrays which | | |
| CC | are useful for measuring and for surveying gene expression and creating | | |
| CC | transgenic non-human animals capable of producing the proteins. The | | |
| CC | present sequence is that of a scanning oligonucleotide useful in examples | | |
| CC | of the invention. Note: The present sequence did not form part of the | | |
| CC | printed specification, but is based on sequence information supplied to | | |
| CC | Derwent by the European Patent Office | | |
| XX | | | |
| Query Match 0.4%; Score 15.4; DB 1; Length 17; Best Local Similarity 94.1%; Pred. No. 1.2e+03; Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0; | | SQ Sequence 17 BP; 6 A; 5 C; 4 G; 0 T; 2 U; 0 Other; | |
| QY | 1820 TCCTGCTGGGAGATC 1836 | | |

Db 17 TTCTGCTCTGGGAGATC 1

RESULT 1190
ACN02146
ID ACN02146 standard; RNA; 17 BP.
XX
AC ACN02146;
XX
DT 22-APR-2004 (first entry)
XX
DE MNV Inozyme substrate SEQ ID NO 2136.
XX
KW MNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
DR WPI; 2002-706994/76.
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 2136; 495pp; English.
XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 47502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
SQ Sequence 17 BP; 2 A; 4 C; 5 G; 0 T; 6 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 1.2e+03;
Matches 11; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

QY 1820 TCCTGCTCTGGGAGATC 1836
: |||:|||||:
Db 1 UUCUCUCUGGAGATC 17

RESULT 1191
ABT40176
ID ABT40176 standard; DNA; 17 BP.

XX
AC ABT40176;
XX
DT 13-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 5813.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001PR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 713; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 6 A; 5 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2206 GGTCCTCCCAACATGTGA 2222
: |||||:
Db 1 GATCCCCCAACATGTGA 17

RESULT 1192
ABZ65192
ID ABZ65192 standard; RNA; 17 BP.
XX
AC ABZ65192;

XX 21-MAR-2003 (first entry)
 XX Human HER2 DNAzyme substrate #649.
 DE
 XX
 XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
 KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;
 KW anti-rheumatic; cancer; AIDS; ss.
 XX
 XX Homo sapiens.
 XX WO200297114-A2.
 XX
 XX 05-DEC-2002.
 XX
 XX 29-MAY-2002; 2002WO-US016840.
 XX
 XX 29-MAY-2001; 2001US-0294140P.
 XX
 XX 06-JUN-2001; 2001US-0296249P.
 XX
 XX 10-SEP-2001; 2001US-0318471P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 XX
 XX Mcswiggen J;
 XX
 XX WPI; 2003-140484/13.
 XX
 XX Novel short interfering RNA and enzymatic nucleic acid useful for
 PT treating cancer, modulates the expression of a nucleic acid encoding
 PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
 XX
 XX Claim 4; Page 145; 185pp; English.
 XX
 XX The invention relates to a novel short interfering RNA (siRNA) nucleic
 CC acid molecule or an enzymatic nucleic acid molecule, that modulates
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
 CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
 CC acid molecule of the invention has cytosolic, anti-HIV, and anti-
 CC rheumatic activity. The nucleic acid molecules are useful for reducing
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
 CC ribozymes of the invention
 XX
 XX Sequence 17 BP; 1 A; 5 C; 7 G; 0 T; 4 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 76.5%; Pred. No. 1.2e+03;
 Matches 13; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 1678 GACTTCGGCTGGCCGC 1694
 |||:|||||:
 1 GACUUCGGCGGCGUCG 17
 DB
 RESULT 1193
 ADI51678
 ID ADI51678 standard; DNA; 17 BP.
 XX
 XX ADI51678;
 XX
 XX 15-APR-2004 (first entry)
 DT
 XX Human tumour suppression/reversion-related DNA sequence SeqID4181.
 DE
 XX tumour suppression; tumour reversion; apoptosis; virus resistance;
 KW cytosolic; virucide; neuroprotective; neurotropic; neuroleptic; probe;
 KW primer; PCR; gene chip; antisense; viral disease; tumour;
 KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
 XX
 XX Homo sapiens.
 OS

XX WO2003025177-A2.
 XX
 XX 27-MAR-2003.
 XX
 XX 17-SEP-2002; 2002WO-IB004523.
 PF
 XX 17-SEP-2001; 2001FR-00011980.
 PR
 XX (MOLE-) MOLECULAR ENGINES LAB.
 XX
 XX Telerman A, Amson R, Tuijnder M;
 PI
 XX WPI; 2003-313354/30.
 DR
 XX
 XX New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 XX Disclosure; SEQ ID NO 4181; 30pp; French.
 PS
 XX This invention relates to novel isolated nucleic acid sequences involved
 CC in the phenomena of tumour suppression, tumour reversion, apoptosis
 CC and/or resistance to viruses. The invention may be useful for the
 CC development of compounds with a cytostatic, virucide, neuroprotective,
 CC neurotropic or neuroleptic activity. The DNA sequences may be useful as
 CC probes and primers for detecting, identifying, quantifying and/or
 CC amplifying nucleic acid, for example as one component of a gene chip, in
 CC vitro as antisense reagents and for production of recombinant
 CC polypeptides. The invention may therefore be useful for preparation of
 CC pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration,
 CC specifically cancer but also Alzheimer's disease and schizophrenia. The
 CC present sequence is that of a nucleic acid sequence of the invention.
 CC Note: The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/publishedpct_sequences
 XX
 XX Sequence 17 BP; 6 A; 5 C; 3 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2206 GGTCCGCCCAACAATGTGA 2222
 |||:|||||:
 1 GATCCCAACAATGTGA 17
 DB
 RESULT 1194
 ABX79779/c
 ID ABX79779 standard; cDNA; 18 BP.
 XX
 XX ABX79779;
 AC
 XX
 XX 17-APR-2003 (first entry)
 DT
 XX
 XX EST polymorphic DNA repeat polynucleotide #104.
 DE
 XX EST; expressed sequence tag; ss; polymorphic repeat; tandem repeat;
 KW polymorphic marker prediction of ubiquitous simple sequences; POMPOUS;
 KW Rep-X; human; genetic disease; drug-treatment; Machado-Joseph;
 KW Haw River syndrome; Huntington's disease; fragile-X syndrome;
 KW Friedreich's ataxia; myotonic dystrophy; hyperandrogenaemia;
 KW spinal atrophy; bulbar atrophy; spinocerebellar ataxia.
 XX
 XX Homo sapiens.
 OS
 XX US6472154-B1.
 XX
 XX 29-OCT-2002.
 PD
 XX 31-DEC-1999; 99US-00475947.
 PF

| | | | | |
|-------------|--|---|--|--|
| XX | 31-DEC-1999; | 99US-00475947. | | |
| XX | (TEXA) UNIV TEXAS SYSTEM. | | | |
| XX | Garner HR, Wren JD, Minna JD, Fondon JW; | | | |
| XX | WPI; 2003-208818/20. | | | |
| XX | Identifying a candidate polymorphic repeat within a coding sequence, for | | | |
| XX | understanding or treating genetic disease, comprises detecting tandem | | | |
| XX | repeats in a target coding sequence and scoring the repeats for | | | |
| XX | polymorphic probability. | | | |
| XX | Example; Col 385; 588pp; English. | | | |
| XX | The invention discloses a method for identifying a candidate polymorphic | | | |
| XX | repeat within a coding sequence (expressed sequence tag, EST), which | | | |
| XX | comprises detecting tandem repeats in a target coding sequence, scoring | | | |
| XX | the repeats for polymorphic probability and generating a dataset | | | |
| XX | correlating the repeats with polymorphic probability to identify a | | | |
| XX | candidate polymorphic repeat. The computational methods (polymorphic | | | |
| XX | marker prediction of ubiquitous simple sequences, POMPous, and Rep-X) are | | | |
| XX | useful for identifying and detecting candidate polymorphic repeats in | | | |
| XX | human genes, which can be used to understand, treat or eliminate genetic | | | |
| XX | diseases, predispositions or adverse drug-treatment reactions. Examples | | | |
| XX | of diseases linked to nucleotide repeats are Machado-Joseph, Haw River | | | |
| XX | syndrome, Huntington's disease, fragile-X syndrome, Friedreich's ataxia, | | | |
| XX | myotonic dystrophy, hyperandrogenaemia, spinal and bulbar atrophy and | | | |
| XX | spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are | | | |
| XX | the polymorphic repeats identified for a search of human ESTs | | | |
| XX | Sequence 18 BP; 8 A; 0 C; 1 G; 9 T; 0 U; 0 Other; | | | |
| SQ | Query Match | 0.4%; Score 15.4; DB 1; Length 18; | | |
| | Best Local Similarity | 94.1%; Pred. No. 1.3e+03; | | |
| | Matches | 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0; | | |
| QY | 2824 ATATATACATATATATA 2840 | | | |
| DB | 18 ATATATATATATATA 2 | | | |
| RESULT 1195 | | | | |
| AAS13733/C | | | | |
| ID | AAS13733 standard; DNA; 18 BP. | | | |
| XX | | | | |
| XX | AAS13733; | | | |
| XX | | | | |
| XX | 08-MAY-2002 (first entry) | | | |
| XX | | | | |
| XX | Simple sequence repeat, SSR, #30. | | | |
| XX | | | | |
| XX | Simple sequence repeat; plant; ds; SSR; ryegrass; fescue; tandem repeat; | | | |
| XX | cereal profiling; grass profiling; seed batch purity testing. | | | |
| XX | Poeae. | | | |
| XX | | | | |
| XX | NZ509193-A. | | | |
| XX | | | | |
| XX | 25-MAY-2001. | | | |
| XX | | | | |
| XX | 03-JAN-2001; 2001NZ-00509193. | | | |
| XX | | | | |
| XX | 24-DEC-1999; 99AU-00004906. | | | |
| XX | 04-MAY-2000; 2000AU-00007310. | | | |
| XX | | | | |
| XX | (SAUS-) STATE SOUTH AUSTRALIA SOUTH AUSTRALIAN R. | | | |
| XX | (UYSC-) UNIV SOUTHERN CROSS. | | | |
| XX | (VICT-) STATE VICTORIA DEPT NATURAL RES & ENVIRO. | | | |
| XX | (UYAD-) UNIV ADELAIDE. | | | |
| XX | (ITMA-) INT MAIZE & WHEAT IMPROVEMENT CENT. | | | |
| XX | | | | |
| PI | Forster JW, Jones ES; | | | |
| XX | WPI; 2001-512563/56. | | | |
| XX | | | | |
| XX | New simple sequence repeats having 2 or more tandemly repeated nucleotide | | | |
| XX | core elements isolated from ryegrass and fescue, useful for selecting of | | | |
| XX | genes in grass or cereal breeding or profiling grass or cereal species | | | |
| XX | varieties. | | | |
| XX | Claim 6; Page 51; 72pp; English. | | | |
| XX | The invention relates to a substantially purified or isolated nucleic | | | |
| XX | acid (1) from ryegrass or fescue species including a simple sequence | | | |
| XX | repeat (SSR), having 2 or more tandemly repeated nucleotide core elements | | | |
| XX | 2-6 nucleotides in length. Also included are a nucleic acid primer | | | |
| XX | suitable for amplifying an SSR, identifying (M1) an SSR by preparing a | | | |
| XX | library of ryegrass or fescue genomic DNA enriched for SSRs and | | | |
| XX | identifying clones in the library containing SSRs, a library of ryegrass | | | |
| XX | or fescue genomic DNA enriched for SSRs prepared by the M1, selecting for | | | |
| XX | a gene in grass or cereal breeding by identifying an SSR that is closely | | | |
| XX | associated with the gene such that the SSR and the gene are | | | |
| XX | preferentially co-inherited, and selecting for the SSR in the breeding, a | | | |
| XX | method for DNA profiling grass or cereal species varieties by assessing, a | | | |
| XX | variation between SSR varieties and testing the purity of grass or cereal | | | |
| XX | seed batches by assessing variation within seed batch of an SSR. The SSRs | | | |
| XX | may be used in the selection of genes in grass or cereal breeding, for | | | |
| XX | profiling grass or cereal species varieties, for testing the purity of | | | |
| XX | grass or cereal seed batches, and for DNA profiling to establish the | | | |
| XX | distinct identity, uniformity and/or stability of a cultivar. The present | | | |
| XX | sequence is a ryegrass or fescue SSR | | | |
| XX | Sequence 18 BP; 9 A; 8 C; 0 G; 1 T; 0 U; 0 Other; | | | |
| SQ | Query Match | 0.4%; Score 15.4; DB 1; Length 18; | | |
| | Best Local Similarity | 94.1%; Pred. No. 1.3e+03; | | |
| | Matches | 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0; | | |
| QY | 2335 GTGTGTGTGTGTGTGTG 2351 | | | |
| DB | 17 GTGTGTGTGTGTGTGTG 1 | | | |
| RESULT 1196 | | | | |
| ABL53363 | | | | |
| ID | ABL53363 standard; DNA; 18 BP. | | | |
| XX | | | | |
| XX | ABL53363; | | | |
| XX | | | | |
| XX | 16-JUL-2002 (first entry) | | | |
| XX | | | | |
| XX | Bovine melanocortin receptor BDF3 PCR primer #2. | | | |
| XX | | | | |
| XX | Bovine; melanocortin; receptor; BDF3; PCR; primer; cattle; ss. | | | |
| XX | | | | |
| XX | Bos taurus. | | | |
| XX | | | | |
| XX | KR2001016520-A. | | | |
| XX | | | | |
| XX | 05-MAR-2001. | | | |
| XX | | | | |
| XX | 16-DEC-2000; 2000KR-00077369. | | | |
| XX | | | | |
| XX | 16-DEC-2000; 2000KR-00077369. | | | |
| XX | (CHUN/) CHUNG E R. | | | |
| XX | | | | |
| XX | Chung ER, Kim UT, Kim YS; | | | |
| XX | WPI; 2001-495297/54. | | | |
| XX | | | | |
| XX | Development of polymerase chain reaction-single strand conformation | | | |
| XX | polymorphism(pcr-sscp) to identify Korean beef cattle. | | | |

PS Claim 1; Page 10; 10pp; Korean.

XX The present invention relates to a new technique of polymerase chain reaction-single strand conformation polymorphism (PCR-SSCP) to identify CC accurately Korean beef cattle in a short time by removing processes which CC requires expensive restriction enzymes. The present sequence is a PCR CC primer for bovine melanocortin receptor (BDF3) which was used to CC illustrate the invention

XX

SQ Sequence 18 BP; 3 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.3e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2088 CCGGGTGGCCAGGACA 2104

Db 2 CCTGGTGGCCAGGACA 18

RESULT 1197

AAF59685/c

ID AAF59685 standard; DNA; 18 BP.

XX

AC AAF59685;

XX

DT 27-APR-2001 (first entry)

XX

DE Human CACP (MSF) gene exon 6 reverse PCR primer.

XX

KW Human; CACP protein; camptodactyly-arthropathy-coxa vara-pericarditis;
KW MSF; megakaryocyte stimulating factor; synovial lubricant;
KW chromosome 1q25-31; osteoarthritis; joint lubrication; osteopathic;
KW antiarthritic; PCR primer; ss.

XX

OS Homo sapiens.

XX

WO200107068-A1.

XX

01-FEB-2001.

XX

21-JUL-2000; 2000WO-US020002.

XX

23-JUL-1999; 99US-0145328P.

PR 19-JUL-2000; 2000US-00145328.

XX

(UYCA-) UNIV CASE WESTERN RESERVE.

PA

Warman ML;

XX

WPI; 2001-182721/18.

DR

XX

New composition comprising the camptodactyly-arthropathy-coxa vara-pericarditis protein in combination with an anesthetic, useful for treating osteoarthritis, or as lubricants of tissue and joints.

PT

XX

Disclosure; Page 29; 34pp; English.

PS

XX

The invention relates to a method of treating osteoarthritis via the administration of a composition comprising the camptodactyly-arthropathy-coxa vara-pericarditis (CACP) protein, or portions of the CACP protein. CC The composition may further comprise a local anesthetic. The composition CC of the invention may be administered via intra-articular or intravenous CC injection. The human CACP protein is identified in the invention as being CC megakaryocyte stimulating factor (MSF). The gene encoding CACP protein CC (MSF) is located on chromosome 1q25-31, and mutations in this gene are CC responsible for the heritable disorder camptodactyly-arthropathy-coxa CC vara-pericarditis, in which patients have synovial hyperplasia without CC evidence of inflammation. CACP protein (MSF) acts as a synovium CC lubricant, and can be used to lubricate tissue and joints in the CC treatment of osteoarthritis. The composition may be applied to reduce the CC symptoms of osteoarthritis (e.g., joint pain, loss of range of movement CC or joint damage). Sequences AAF59672-AAF59693 represent PCR primers used

CC

to amplify exonic gene fragments from CACP genomic DNA or to amplify cDNA fragments for the detection of mutations

CC

SQ Sequence 18 BP; 2 A; 2 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.3e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2600 CCCACACCCAAAGCTGA 2616

Db 18 CCTACACCCAAAGCTGA 2

RESULT 1198

ADH70789/c

ID ADH70789 standard; DNA; 18 BP.

XX

AC ADH70789;

XX

DT 25-MAR-2004 (first entry)

XX

DE Human Vbeta gene repeat sequence #579.

XX

KW human; T-cell associated disease; Vbeta; autoimmune disease;
KW degenerative nervous system disease; graft versus host disease;
KW hypersensitivity disease; infectious disease; neoplastic disease;
KW Addison's disease; atrophic gastritis;
KW degenerative nervous system disease; multiple sclerosis;
KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KW allergy; type II hypersensitivity; Goodpasture's syndrome;
KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
KW breast cancer; ds.

XX

OS Homo sapiens.

XX

US2002150891-A1.

PN

17-OCT-2002.

PD

XX

05-MAR-1999; 99US-00263959.

PF

XX

19-SEP-1994; 94US-00309335.

PR 19-SEP-1995; 95US-00531241.

XX

(HOOD/) HOOD L E.
(ROWE/) ROWEN L.

PA

Hood LE, Rowen L;

PI

XX

WPI; 2004-059052/06.

DR

XX

Kit for diagnosing and treating T-cell associated diseases e.g.
PT autoimmune, degenerative nervous system and infectious disease, comprises
PT nucleic acid primers specifically priming and allowing amplification of a
PT Vbeta gene.

XX

Disclosure; SEQ ID NO 983; 164pp; English.

PS

XX

The invention relates to a kit for diagnosing and treating T-cell associated diseases which comprises a panel of nucleic acid primers CC specifically priming and allowing amplification of each Vbeta gene, CC Vbetakna or cDNA. The kit is useful for diagnosing organ transplant CC rejection and diagnosing and treating T-cell associated diseases CC including autoimmune diseases, degenerative nervous system diseases, CC graft versus host disease, hypersensitivity diseases, infectious diseases CC and neoplastic diseases. Autoimmune diseases include Addison's disease, CC atrophic gastritis. Degenerative nervous system diseases include multiple CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type I CC hypersensitivities such as contact with allergens that lead to

Query Match 0.4%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2975 AGAGGACCGGCTTTT 2991
||| ||||| ||||| |||||
DB 2 AGATGACCGGCTTTT 18

RESULT 1201
AA60990/c
ID AA60990 standard; cDNA to mRNA; 19 BP.
XX
AC
XX
AC
XX
03-SEP-1999 (first entry)
XX
Tomato TDET1 gene amplifying nested primer.

XX Tomato; TDET1 (HP-2) gene; light hypersensitive phenotype; mutation;
KW Carotenoid; chlorophyll; flavonoid; transgenic; TDET1 gene; anthocyanin;
KW agro-industrial; antioxidant; antimicrobial; plant protection; variant;
KW ornamental; herbicide; fruit ripening; PCR primer; ss.
XX
OS Synthetic.
OS Lycopersicon sp.
XX
PN WO9929866-A1.
XX
PD 17-JUN-1999.
XX
PF 07-DEC-1998; 98WO-IT000350.
XX
PR 09-DEC-1997; 97IT-RM000760.
XX
PA (STAZ-) STAZIONE ZOOLOGICA DOHRN ANTON.
XX
PI Bowler C, Mustilli AC;
XX
DR WPI; 1999-385610/32.
XX

PT Nucleotide sequences of the tomato TDET1 (HP-2) gene, which if modified,
PT results in a light hypersensitive phenotype.
XX
PS Disclosure; Page 15; 57pp; English.
XX
CC The invention describes a tomato TDET1 (HP-2) gene, which if modified,
CC result in a light hypersensitive phenotype. The gene, when altered, is
CC responsible for the light hypersensitive mutant phenotype in Solanum
CC lycopersicum (tomato) plants, the phenotype comprising a reduced growth
CC of the plant associated with high levels of carotenoids and/or
CC chlorophylls and/or flavonoids. Vectors comprising the sequence gene can
CC be used to produce transgenic plants, such as pepper, eggplant, soybean,
CC grape, melon, rice, carrot, spinach, citrus, pomaceae or ornamental
CC species, that contain a tomato TDET1 gene. The TDET1 mutants are useful
CC in the agro-industrial sector, for generating tomato fruits with high
CC carotenoid and/or flavonoid contents. Carotenoids and flavonoids have
CC antioxidant properties and in addition some flavonoids exhibit
CC antitumoural properties. They also exhibit a role in plant protection
CC against pathogenic agents and UV light irradiation. Manipulation of the
CC TDET1 gene expression can also be used to modify anthocyanin and
CC carotenoid content in ornamental species for the achievement of new
CC colour variants. Alteration of carotenoid content is useful for improving
CC resistance to Norflurazon herbicides. Further it is possible to combine a
CC modified TDET1 activity with mutations such as rin, nor and Nr, which
CC interrupt the fruit ripening process
XX
SQ Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1291 GCGTGAAGATGCTGAA 1307
||| ||||| ||||| |||||
DB 19 GCGTGAAGATGCTGAA 3

RESULT 1202
ADE27190
ID ADE27190 standard; RNA; 19 BP.
XX
AC
XX
ADE27190;
XX
DT 29-JAN-2004 (first entry)
XX
DE
XX
DE Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:134.

XX short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
KW stearyl-CoA desaturase; RNA interference; anorectic; anti-diabetic;
KW anti-atherosclerotic; cytostatic; virucide; obesity; diabetes;
KW atherosclerosis; cancer; viral infection; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX
OS Synthetic.
XX
PN WO2003070885-A2.
XX
PD 28-AUG-2003.
XX
PF 13-FEB-2003; 2003WO-US004317.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 03-SEP-2002; 2002US-0409293P.
PR 20-SEP-2002; 2002US-0412304P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Thompson J;
XX
DR WPI; 2003-721687/68.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of obesity or diabetes, downregulates expression of the
PT stearyl-CoA desaturase gene.

Example 3; SEQ ID NO 134; 139pp; English.

XX The present invention describes a short interfering nucleic acid (siNA)
XX that downregulates expression of the SCD (stearoyl-CoA desaturase) gene
XX by RNA interference. Also described: (1) modulating expression of SCD
XX genes in cells, tissue explants or organisms by introduction of siNA; (2)
XX kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
XX complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
XX siNAs have anorectic, anti-diabetic, anti-atherosclerotic, cytostatic and
XX virucide activities. The siNAs can be used to modulate expression of SCD
XX genes, in cells, tissue explants or organisms, e.g. for treating obesity;
XX diabetes (types I and II); atherosclerosis; cancer and viral infections.
XX They can also be used for drug screening; diagnosis; target
XX identification and validation; genetic engineering; pharmacogenomics;
XX studying gene function and gene mapping (e.g. of single-nucleotide
XX polymorphisms). The present sequence represents an SCD siNA, which is
XX used in the exemplification of the present invention.

XX
SQ Sequence 19 BP; 8 A; 2 C; 1 G; 0 T; 8 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 19;
Best Local Similarity 52.9%; Pred. No. 1.4e+03;
Matches 9; Conservative 7; Mismatches 1; Indels 0; Gaps 0;

| | | | |
|-------------|---------------------------------|---|--|
| Qy | 2825 | TATATACATATATATAT 2841 | |
| Db | 1 | UAUAUACAUAUAUACA 17 | |
| RESULT 1203 | | | |
| ID | ADE27480/C | | |
| XX | ADAE27480 standard; RNA; 19 BP. | | |
| XX | AC | ADE27480; | |
| XX | DT | 29-JAN-2004 (first entry) | |
| XX | DE | Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:424. | |
| XX | KW | short interfering nucleic acid; siNA; downregulation; inhibition; SCD; | |
| XX | KW | stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic; | |
| XX | KW | atherosclerosis; cytostatic; virucide; obesity; diabetes; | |
| XX | KW | genetic engineering; cancer; viral infection; drug screening; | |
| XX | OS | Synthetic. | |
| XX | PN | WO2003070885-A2. | |
| XX | PD | 28-AUG-2003. | |
| XX | PF | 13-FEB-2003; 2003WO-US004317. | |
| XX | PR | 20-FEB-2002; 2002US-0358580P. | |
| XX | PR | 11-MAR-2002; 2002US-0363124P. | |
| XX | PR | 06-JUN-2002; 2002US-0386782P. | |
| XX | PR | 29-AUG-2002; 2002US-0406784P. | |
| XX | PR | 05-SEP-2002; 2002US-0408378P. | |
| XX | PR | 03-SEP-2002; 2002US-0409293P. | |
| XX | PR | 20-SEP-2002; 2002US-0412304P. | |
| XX | PR | 15-JAN-2003; 2003US-0440129P. | |
| XX | PA | (RIBO-) RIBOZYME PHARM INC. | |
| XX | PI | McsWiggen J, Beigelman L, Thompson J; | |
| XX | DR | WPI; 2003-721687/69. | |
| XX | PT | New short interfering nucleic acid, useful e.g. for treatment and | |
| XX | PT | diagnosis of obesity or diabetes, downregulates expression of the | |
| XX | PT | stearoyl-CoA desaturase gene. | |
| XX | PS | Example 3; SEQ ID NO 424; 139pp; English. | |
| XX | CC | The present invention describes a short interfering nucleic acid (siNA) | |
| XX | CC | that downregulates expression of the SCD (stearoyl-CoA desaturase) gene | |
| XX | CC | by RNA interference. Also described: (1) modulating expression of SCD | |
| XX | CC | genes in cells, tissue explants or organisms by introduction of siNA; (2) | |
| XX | CC | kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or | |
| XX | CC | complexes of siNA; and (4) vectors that express siNA. SCD inhibiting | |
| XX | CC | siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and | |
| XX | CC | virucide activities. The siNAs can be used to modulate expression of SCD | |
| XX | CC | genes, in cells, tissue explants or organisms, e.g. for treating obesity; | |
| XX | CC | diabetes (types I and II); atherosclerosis; cancer and viral infections. | |
| XX | CC | They can also be used for drug screening; diagnosis; target | |
| XX | CC | identification and validation; genetic engineering; pharmacogenomics; | |
| XX | CC | studying gene function and gene mapping (e.g. of single-nucleotide | |
| XX | CC | polymorphisms). The present sequence represents an SCD siNA, which is | |
| XX | CC | used in the exemplification of the present invention. | |
| XX | SQ | Sequence 19 BP; 8 A; 1 C; 2 G; 0 T; 8 U; 0 Other; | |
| | | Query Match 0.4%; Score 15.4; DB 1; Length 19; | |
| | | Best Local Similarity 94.1%; Pred. No. 1.4e+03; | |
| | | Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0; | |
| Qy | 2825 | TATATACATATATATAT 2841 | |
| Db | 1 | UAUAUACAUAUAUACA 17 | |
| RESULT 1204 | | | |
| ID | ADF84116/C | | |
| XX | ADDF84116 standard; RNA; 19 BP. | | |
| XX | AC | ADF84116; | |
| XX | DT | 26-FEB-2004 (first entry) | |
| XX | DE | Human breakpoint cluster region-targeted siRNA - SEQ ID 410. | |
| XX | KW | short interfering nucleic acid; siNA; breakpoint cluster region; | |
| XX | KW | v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; | |
| XX | KW | cytostatic; leukaemia; lymphoma; human; BCR; ss; siRNA. | |
| XX | OS | Homo sapiens. | |
| XX | PN | WO2003070972-A2. | |
| XX | PD | 28-AUG-2003. | |
| XX | PF | 20-FEB-2003; 2003WO-US005234. | |
| XX | PR | 20-FEB-2002; 2002US-0358580P. | |
| XX | PR | 11-MAR-2002; 2002US-0363124P. | |
| XX | PR | 06-JUN-2002; 2002US-0386782P. | |
| XX | PR | 15-AUG-2002; 2002US-0404039P. | |
| XX | PR | 29-AUG-2002; 2002US-0406784P. | |
| XX | PR | 05-SEP-2002; 2002US-0408378P. | |
| XX | PR | 09-SEP-2002; 2002US-0409293P. | |
| XX | PR | 14-JAN-2003; 2003US-0439922P. | |
| XX | PR | 15-JAN-2003; 2003US-0440129P. | |
| XX | PA | (RIBO-) RIBOZYME PHARM INC. | |
| XX | PI | McsWiggen J, Beigelman L, Chowrira B; | |
| XX | DR | WPI; 2003-679889/64. | |
| XX | PT | New double-stranded interfering nucleic acid, useful e.g. for treatment | |
| XX | PT | and diagnosis of leukemia and lymphoma, downregulates the breakpoint | |
| XX | PT | cluster region-Abelson (BCR-ABL) gene. | |
| XX | PS | Example 7; SEQ ID NO 410; 197pp; English. | |
| XX | CC | The invention relates to a novel double-stranded short interfering | |
| XX | CC | nucleic acid (siNA) that downregulates expression of the breakpoint | |
| XX | CC | cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 | |
| XX | CC | (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic | |
| XX | CC | activity and may be useful for modulating expression of the BCR-ABL gene, | |
| XX | CC | as well as for treating leukaemia or lymphoma and in diagnosis, drug | |
| XX | CC | screening, target identification and validation, genetic engineering, | |
| XX | CC | gene function studies and gene mapping. The current sequence is that of | |
| XX | CC | the human BCR-targeted siRNA of the invention. | |
| XX | SQ | Sequence 19 BP; 4 A; 11 C; 1 G; 0 T; 3 U; 0 Other; | |
| | | Query Match 0.4%; Score 15.4; DB 1; Length 19; | |
| | | Best Local Similarity 94.1%; Pred. No. 1.4e+03; | |
| | | Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0; | |
| Qy | 855 | CGAGGAGCTGTGGAGG 871 | |
| Db | 17 | GGTGGAGCTGTGGAGG 1 | |
| RESULT 1205 | | | |
| ID | ADF83853 | | |
| XX | ADDF83853 standard; RNA; 19 BP. | | |


```
XX OS Sus scrofa.
XX PN W02004035820-A1.
XX XX
XX PD 29-APR-2004.
XX PF
XX PF 10-OCT-2003; 2003WO-EP011269.
XX XX
XX PR 11-OCT-2002; 2002EP-00022810.
XX PA (FBFF-) FBF FORDERVEREIN BIOTECHNOLOGIEFORSCHUN.
XX PI Kalm E, Reinsch N, Schwarz S;
XX XX WPI; 2004-348471/32.
XX DR
XX FT Determining predisposition to the splay-leg phenotype in mammals and
XX FT birds, useful for selecting breeding animals, by detecting specific
XX FT chromosomal markers.
XX PS Example 5; Page 62; 104pp; German.
XX CC The invention describes the use of a nucleic acid (I), of at least 8
XX CC nucleotides (nt), and (essentially) identical with nucleic acid (II)
XX CC present at specified positions in chromosomes 5 or 11 of pigs (or
XX CC homologous positions in other animals) for determining predisposition for
XX CC expression or inheritance of the 'splay-leg' phenotype in mammals and
XX CC poultry. The specified positions are regions of microsatellite markers
XX CC (a) for chromosome 5, Sw1468, Sw2, Sw1200, Sw2425, Sw995, IGFI, S0005,
XX CC Sw963, Sw1987, S0018, Sw304, Sw310, Sw1974, Sw426, Sw1094, Sw986 or
XX CC Sw1982 and (b) for chromosome 11, S0182, S0071, Sw2008, Sw435, S0009,
XX CC S0230 and Sw486. Also described are: an in vitro method for determining
XX CC the predisposition for expression or inheritance of the 'splay-leg'
XX CC phenotype in mammals, their (un)fertilized eggs or sperm by detecting
XX CC presence, condition or expression of (III); and a kit comprising primer
XX CC pair for amplification of (II); a hybridisation probe, of at least 8 nt,
XX CC that binds to (II), or specific antibody (or fragment or derivative) or
XX CC aptamer that binds to (II), in one or more containers. The method is used
XX CC for selection of animals (domestic, breeding or farm animals, e.g.
XX CC cattle, dogs, pigs, chickens etc.) that lack predisposition to the
XX CC phenotype, particularly as a genomic screen applied to many mammals in a
XX CC population. This sequence represents a primer that can be used to
XX CC determine predisposition for expression or inheritance of the 'splay-leg'
XX CC phenotype.
XX SQ Sequence 19 BP; 2 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3212 CCTCCAGCCTTAAG 3228
DB 19 CCTCCAGCCTGAAG 3
RESULT 1208
AAD55499
ID AAD55499 standard; DNA; 20 BP.
XX AC
XX AC AAD55499;
XX XX
XX DT 07-AUG-2003 (first entry)
XX DE Human FGFR-3 antisense oligonucleotide, ISIS #125205.
XX XX
XX KW Human; antisense; fibroblast growth factor receptor 3; prophylaxis;
XX KW developmental disorder; hyperproliferative disorder; antisense therapy;
XX KW FGFR-3; ACH; JTK4; CEK2; cancer; phosphorothioate; ss.
XX XX
XX OS Homo sapiens.
XX OS Synthetic.
```

```
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone; All cytidine residues
XX FT are 5-methylcytidines"
XX FT modified_base 1..5
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX FT modified_base 16..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX PN W02003023004-A2.
XX XX
XX XX 20-MAR-2003.
XX PD
XX PF 06-SEP-2002; 2002WO-US028549.
XX XX
XX PR 10-SEP-2001; 2001US-00953047.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Monia BP, Wyatt JR;
XX XX WPI; 2003-313244/30.
XX DR
XX XX Novel compound targeted to a nucleic acid molecule encoding fibroblast
XX PT growth factor receptor 3, useful for inhibiting the expression of the
XX PT receptor and for treating an animal having cancer or developmental
XX PT disorder.
XX XX Example 15; Page 79; 120pp; English.
XX PS The invention relates to antisense compounds targetted to a nucleic acid
XX CC molecule encoding fibroblast growth factor (FGF) receptor 3 (also known
XX CC as FGFR-3, ACH, JTK4 and CEK2) to inhibit its expression. Antisense
XX CC compounds of the invention are useful for treating diseases or conditions
XX CC associated with FGFR-3 such as developmental disorders or
XX CC hyperproliferative disorders, especially cancer of colorectal, bladder,
XX CC bone, lung, cervical, breast or skin. They are useful as research
XX CC reagents, therapeutics, prophylaxis, kits and diagnostics, and as tools
XX CC in differential and/or combinatorial analyses to elucidate expression
XX CC patterns of a portion of the genes expressed within cells and tissues.
XX CC They are also useful in antisense therapy. The present sequence is an
XX CC antisense oligonucleotide targetted to human FGFR-3
XX SQ Sequence 20 BP; 9 A; 2 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3464 ATATATATCTATATATA 3480
DB 1 ATATATATCTATATATA 17
RESULT 1209
ABT07496
ID ABT07496 standard; DNA; 20 BP.
XX AC
XX AC ABT07496;
XX XX
XX DT 14-NOV-2002 (first entry)
XX DE Rat protein phosphatase 2 oligo inhibitor SEQ ID No 110.
XX KW Cytostatic; antidiabetic; antisense therapy; aberrant insulin regulation;
XX KW protein phosphatase 2 catalytic beta subunit; antisense compound; cancer;
```

KW hyperproliferative disorder; diabetes; inflammation; tumour; rat; ds.
XX
OS Rattus norvegicus.
XX
PN WO200264737-A2.
XX
PD 22-AUG-2002.
XX
PF 31-JAN-2002; 2002WO-US002805.
XX
PR 09-FEB-2001; 2001US-00780045.
XX
PA (ISTS-) ISIS PHARM INC.
XX
PI Monia BP, Wyatt JR;
XX
DR WPI; 2002-657588/70.
XX
XX New antisense oligonucleotides targeted to nucleic acid encoding Protein
PT Phosphatase 2 catalytic subunit beta, useful for treating diseases
PT related to Protein Phosphatase 2 catalytic subunit beta expression, such
PT as cancer.
XX
PS Example 16; Page 98; 137pp; English.
XX
CC The invention relates to a novel compound 8-50 nucleotides in length
CC targeted to a nucleic acid molecule encoding a protein phosphatase 2
CC catalytic beta subunit, where the compound specifically hybridises with
CC and inhibits the expression of protein phosphatase 2 catalytic beta
CC subunits, or specifically hybridises with at least an 8-nucleotide
CC portion of an active site on a nucleic acid molecule encoding a protein
CC phosphatase 2 catalytic beta subunit. The antisense compounds are useful
CC for modulating the expression of protein phosphatase 2 catalytic beta
CC subunits and for treating diseases or conditions associated with
CC expression of protein phosphatase 2 catalytic beta subunits, e.g.
CC aberrant insulin regulation or diabetes or a hyperproliferative disorder,
CC particularly cancer. The antisense compounds are also useful for
CC diagnostics, therapeutics, prophylaxis, e.g. to prevent or delay
CC infection, inflammation or tumour formation, as research reagents and
CC kits, and in distinguishing between functions of various members of a
CC biological pathway. This polynucleotide sequence represents an
CC oligonucleotide inhibitor of rat protein phosphatase 2 catalytic beta
CC subunit mRNA levels of the invention. NOTE: This oligonucleotide contains
CC phosphorothioate residues and has 2'- MOE wings with a deoxy gap
XX
SQ Sequence 20 BP; 7 A; 0 C; 1 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3465 TATATATCTATATATAT 3481
DB 1 TATATATGTATATATAT 17

RESULT 1210
AB291730/C
ID AB291730 standard; DNA; 20 BP.
XX
AC AB291730;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antisthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX

OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 6972; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antisthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 8 A; 0 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2823 TATATATACATATATAT 2839
DB 17 TATATATACATATAT 1

RESULT 1211
ABD27960/C
ID ABD27960 standard; DNA; 20 BP.
XX
AC ABD27960;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA497002-derived oligonucleotide SEQ ID 6972.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antisthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW

KW pulmonary transplantation rejection; ss; primer.
 XX Homo sapiens.
 OS
 XX W0200285309-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI
 XX WPI; 2003-093058/08.
 DR
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 6972; 763pp; English.
 PS
 XX This invention describes a novel composition (a) a first active agent,
 XX comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 8 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. NO. 1.4e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2823 TATATATACATATAT 2839
 DB 17 TATATATACATATAT 1
 RESULT 1212
 AAQ05900/c
 ID AAQ05900 standard; DNA; 20 BP.
 XX
 AC AAQ05900;

XX 17-DEC-2001 (revised)
 DT 16-JAN-1991 (first entry)
 XX
 XX Probe AD08 to detect Listeria monocytogenes.
 DE
 XX Listeria monocytogenes; probe AD08; dairy products; milk; cheese; ss.
 KW
 XX Synthetic.
 OS
 XX USN7411965-N.
 PN
 XX 21-AUG-1990.
 PD
 XX 25-SEP-1989; 89US-00411965.
 PF
 XX 25-SEP-1989; 89US-00411965.
 PR
 XX (USSH) US FOOD & DRUG ADM.
 PA
 XX Datta A;
 PI
 XX WPI; 1990-290094/38.
 DR
 XX Synthetic Listeria monocytogenes oligo-nucleotide probes - used for
 PT detection and enumeration of organism in dairy prods. e.g. milk and
 PT cheese.
 PT
 XX Disclosure; Page 18; 23pp; English.
 PS
 XX This probe, from construct M13-mp18, is from 162-181 base of the sequence
 CC represented in AAQ05931, which is the presumptive hemolysin gene of L.
 CC monocytogenes. The probe is used for detection and enumeration of
 CC L.monocytogenes, esp. for detection in dairy prods. such as milk and
 CC cheese by colony hybridisation assays. See also AAQ05898-900 and AAQ05930
 CC -31. (Note: Revised entry submitted to correct the patent number format
 CC of US Government-owned NTIS applications to prevent clashes with ongoing
 CC US granted patent numbers. For further information please visit the
 CC Derwent web site at www.derwent.com/dwpi/updates/ntis_us.html.)
 XX
 SQ Sequence 20 BP; 2 A; 3 C; 9 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. NO. 1.4e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 446 GCAACTACACTGCGTC 462
 DB 17 GCAACTACACTGCGCC 1
 RESULT 1213
 AAQ46062/c
 ID AAQ46062 standard; DNA; 20 BP.
 XX
 AC AAQ46062;
 XX
 XX 25-MAR-2003 (revised)
 DT 08-FEB-1994 (first entry)
 XX
 XX Sequence of PCR primer AD08 for the amplification of iap (beta-
 DE haemolysin) virulence factor.
 DE
 XX Virulence factor; Listeria detection; food poisoning; iap; PCR;
 KW beta-haemolysin; primer; ss.
 XX
 OS Synthetic.
 XX
 XX CH682156-A5.
 PN
 XX 30-JUL-1993.
 PD
 XX 28-JUN-1990; 90CH-00002190.
 PF

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XX 28-JUN-1990; 90CH-00002190.
XX (CAND/) CANDRIAN U.
PA (FURR/) FURRER B.
PA (HOEF/) HOEFELIN C.
PA (LUETH/) LUETHY J.
XX Candrian U, Furrer B, Hoeefein C, Luethy J;
XX WPI; 1993-265174/34.
XX Listeria monocytogenes detection by enzymatic nucleic acid amplification
PT - using oligo-nucleotide(s) derived from alpha-haemolysin and/or beta-
PT haemo-lysin virulence factors in polymerase chain reactions.
XX Claim 3; Page 2; 2pp; German.
XX Oligos L01, L02, L03 and L04 are used for the amplification of hly (alpha
CC -haemolysin) virulence factor; and oligos AD07, AD08 and AD09 are used
CC for the amplification of iap (beta-haemolysin) virulence factor. They are
CC used in a detection method for Listeria monocytogenes in food samples
CC which is faster and more sensitive than the classical bacteriological
CC methods. (Updated on 25-MAR-2003 to correct PN field.)
XX SQ Sequence 20 BP; 2 A; 3 C; 9 G; 6 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX 446 GCAACTACACCTCGTC 462
Db 17 GCAACTACACCTCGCC 1
RESULT 1214
AAT31581/C
ID AAT31581 standard; DNA; 20 BP.
XX AAT31581;
XX 25-SEP-1996 (first entry)
XX 3' PCR primer for murine Ich-1 amplification.
XX Ich-1; ICE-ced-3 homologue; programmed cell death; apoptosis;
KW interleukin-1 beta converting enzyme; gene therapy; primer; PCR;
KW polymerase chain reaction; ss.
XX Synthetic.
XX WO9620721-A1.
XX 11-JUL-1996.
XX 04-JAN-1996; 96WO-US000177.
XX 04-JAN-1995; 95US-00368704.
XX (GEHO ) GEN HOSPITAL CORP.
XX Yuan J, Miura M;
XX WPI; 1996-333763/33.
XX Preventing or promoting programmed cell death in vertebrate cells -
PT comprises inhibiting or increasing the activity of interleukin-1-beta
PT converting enzyme, or altering expression of other related genes.
XX Example 5; Page 77; 127pp; English.
XX Quantitative PCR analysis was performed using primers (AAT31580-81) to

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CC amplify mouse Ich-1, primers (AAT31582-83) to amplify human Ich-1,
CC primers (AAT31584-85) to amplify human interleukin-1 beta converting
CC enzyme (hICE), and control primers (AAT31586-87) for mouse beta-actin.
CC Ich-1 is a new member of the ICE/ced-3 family of cell death genes. Ich-1L
CC (see also AAT31552) and Ich-1S (AAT31553) were amplified simultaneously
CC to produce DNA fragments of 234 and 295 bp, respectively. Expression of
CC Ich-1S was detected in HeLa and Jurkat cells but not in THP.1 or U937
CC cells. Expression levels of Ich-1L increased in dying hybridoma DO11.10
XX cells
XX SQ Sequence 20 BP; 4 A; 8 C; 1 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX 1353 CGAGATGATGAAGATGA 1369
Db 20 GGAGTTGATGAAGATGA 4
RESULT 1215
AAT30411/C
ID AAT30411 standard; DNA; 20 BP.
XX AAT30411;
XX 28-JAN-1997 (first entry)
XX Compound simple sequence repeat primer (CA) 7.5(TA) 2.5.
XX Detection; polymorphism; perfect compound simple sequence repeat;
KW adaptor directed primer; genome; genetic; fingerprinting;
KW amplified fragment length polymorphism assay; microsatellite region;
KW genetic trait marking; germplasm comparisons; compound; ss.
XX Synthetic.
XX WO9617082-A2.
XX 06-JUN-1996.
XX 21-NOV-1995; 95WO-US015150.
XX 28-NOV-1994; 94US-00346456.
XX (DUPO ) DU PONT DE NEMOURS & CO E I.
XX Morgante M, Vogel JM;
XX WPI; 1996-277795/28.
XX Modified amplified fragment length polymorphism assay - for detection of
PT polymorphism esp. in micro:satellite regions.
XX Example 2; Page 84; 173pp; English.
XX Detecting polymorphisms between 2 nucleic acid samples, esp. in
CC microsatellite regions, comprises digesting the nucleic acid to generate
CC fragments, ligating adaptor segments to their ends, amplifying them using
CC primer directed amplification and comparing the prods. to detect
CC differences. The primers used in the amplification comprise a primer
CC consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
CC directed primer, comprising a sequence complementary to an adaptor
CC segment. The present sequence is an example of a compound SSR primer. The
CC method represents a modified amplified fragment length polymorphism
CC assay, which is partic. useful for genome fingerprinting, i.e. for
CC genetic trait marking and germplasm comparisons
XX SQ Sequence 20 BP; 10 A; 7 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;

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| | |
|-------------|---|
| AC | AAX84670; |
| XX | |
| DT | 20-SEP-1999 (first entry) |
| XX | |
| DE | Primer for KDR signal transduction inducer protein coding sequence. |
| XX | |
| KW | KDR signal transduction inducer protein; human; diabetic retinopathy; |
| KW | vascular endothelial cell growth receptor; abnormal neovascularisation; |
| KW | kinase insert domain-containing receptor; solid tumour proliferation; |
| KW | gene therapy; metastasis; chronic rheumatoid arthritis; psoriasis; |
| KW | retinopathy; retinopathy of prematurity; PCR primer; ss. |
| XX | |
| OS | Synthetic. |
| OS | Homo sapiens. |
| XX | |
| FN | W09931238-A1. |
| XX | |
| PD | 24-JUN-1999. |
| XX | |
| DF | 11-DEC-1998; 98WO-JP005612. |
| XX | |
| PR | 12-DEC-1997; 97JP-00343474. |
| XX | |
| PA | (KYOW) KYOWA HAKKO KOGYO KK. |
| PA | (SHIB/) SHIBUYA M. |
| XX | |
| PI | Shibuya M, Yabana N; |
| XX | |
| DR | WPI; 1999-405033/34. |
| XX | |
| PT | KDR signal transduction inducing protein and antibodies to it. |
| XX | |
| PS | Example 1; Page 63; 82pp; Japanese. |
| XX | |
| CC | This sequence represents a PCR primer for DNA encoding the protein of the |
| CC | invention, which induces signal transduction of the vascular endothelial |
| CC | cell growth receptor KDR (kinase insert domain-containing receptor) by |
| CC | binding to its intracellular domain. The protein can be used in the |
| CC | investigation, diagnosis and treatment (including gene therapy) of |
| CC | diseases in which abnormal neovascularisation takes place, such as solid |
| CC | tumour proliferation, metastasis; chronic rheumatoid arthritis; psoriasis |
| CC | and retinopathy (including diabetic retinopathy and retinopathy of |
| CC | prematurity). It may be used as a screen for candidate KDR signal |
| CC | transduction inhibitors for therapeutic use |
| XX | |
| SQ | Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other; |
| | |
| | Query Match 0.48; Score 15.4; DB 1; Length 20; |
| | Best Local Similarity 94.1; Pred. No. 1.4e+03; |
| | Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0 |
| | |
| Qy | 1609 AAGTGCATCCACAGGGA 1625 |
| | |
| Dd | 4 AAGTGTATCCACAGGGA 20 |
| | |
| RESULT 1218 | |
| AAD35727/c | |
| ID | AAD35727 standard; DNA; 20 BP. |
| XX | |
| AC | AAD35727; |
| XX | |
| DT | 26-JUL-2002 (first entry) |
| XX | |
| DE | Human hIBeta4BP antisense oligonucleotide, ISIS #129429. |
| XX | |
| KW | Antisense; human Integrin beta 4 binding protein; hIBeta4BP; cyostatic; |
| KW | cell proliferation; cancer; gene therapy; phosphorothioate backbone; ss. |
| XX | |
| OS | Homo sapiens. |
| XX | |
| Key | Location/Qualifiers |
| FT | modified base 1..20 |

PN WO200196371-A2.
 XX 20-DEC-2001.
 XX 13-JUN-2001; 2001WO-EP006713.
 XX 16-JUN-2000; 2000US-0211914P.
 PR 23-JUN-2000; 2000EP-00113049.
 PR 28-JUN-2000; 2000US-0214518P.
 PR 17-APR-2001; 2001EP-00109537.
 XX (DEVE-) DEVELOGEN AG.
 XX Broenner G, Ciossek T, Dohrmann C, Haeder T, Rothe M;
 XX WPI; 2002-106464/14.
 XX Novel nucleic acid encoding adipose polypeptide which regulates, causes
 PT or contributes to obesity, useful for treating obesity, heart disease,
 PT hypertension, infertility, and controlling weight loss in cancer
 PT patients.
 XX Claim 1; Page 157; 188pp; English.
 XX The invention relates to a nucleic acid encoding a adipose (ADP)
 CC polypeptide which regulates, causes or contributes to obesity in an
 CC animal or a human. The polynucleotides, proteins, ant-adv antibodies,
 CC modulators of adp activity, adp antisense nucleic acids, expression
 CC vectors, adp transgenic animals are useful in the diagnosis and treatment
 CC of obesity, adipositas, bulimia, wasting (cachexia), eating disorders
 CC and/or disorders of body weight/body mass, weight loss due to cancer or
 CC infectious diseases, genetic disorders associated with hypogonadism e.g.
 CC Prader-Willi syndrome, Laurence-Moon-Biedl syndrome, hypothyroidism,
 CC diabetes, Cushing's syndrome, endocrine disorders, gastrointestinal
 CC diseases, inflammatory bowel disease, ulcerative colitis, and anorexia
 CC nervosa. They are also useful for treating disorders of body weight/mass
 CC e.g. glycogen storage diseases, and lipid storage diseases and for
 CC treating lipomas, and/or liposarcomas. The compositions are also useful
 CC for treating heart disease, hypertension, and infertility and for
 CC treating conditions associated with under weight e.g. enhancing or
 CC controlling fertility, controlling weight loss in acquired
 CC immunodeficiency syndrome (AIDS) or cancer patients. The present sequence
 CC is a PCR primer used to amplify an adp nucleic acid
 XX
 SQ Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 1.4e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 254 ACAAGAAGCTGCTGGCC 270
 Db 4 ACAAGAAGCTGCTGTC 20
 RESULT 1221
 ABN86953
 ID ABN86953 standard; DNA; 20 BP.
 XX
 AC ABN86953;
 XX
 XX 29-JUL-2002 (first entry)
 DT
 XX Human NOV7 forward PCR primer SEQ ID NO:72.
 DE
 DE Human; NOVX; cytostatic; antiarteriosclerotic; cardiovascular; lymphoma;
 KW anti-diabetic; immunosuppressive; neuroprotective; gene therapy; cancer;
 KW cardiomyopathy; atherosclerosis; cell signal processing; diabetes; AIDS;
 KW metabolic pathway modulation; neoplastic; neurological disorder; asthma;
 KW adenocarcinoma; prostate cancer; uterus cancer; immune response;
 KW Crohn's disease; multiple sclerosis; Graft versus host disease;
 KW PCR primer; ss.
 XX

OS Homo sapiens.
 XX WO200230974-A2.
 PN 18-APR-2002.
 PD 12-OCT-2001; 2001WO-US031922.
 XX 12-OCT-2000; 2000US-0240113P.
 PR 16-OCT-2000; 2000US-0240625P.
 PR 16-OCT-2000; 2000US-0240637P.
 PR 16-OCT-2000; 2000US-0240648P.
 PR 16-OCT-2000; 2000US-0240662P.
 PR 16-OCT-2000; 2000US-0240669P.
 PR 16-OCT-2000; 2000US-0240703P.
 PR 16-OCT-2000; 2000US-0240732P.
 PR 16-OCT-2000; 2000US-0241190P.
 PR 18-JAN-2001; 2001US-0262455P.
 XX (CURA-) CURAGEN CORP.
 PA (MILL/) MILLET I.
 XX
 XX Grosse WM, Alsobrook JP, Lepley DM, Burgess CE, Mishra V;
 PI Kekuda R, Li L, Padigaru M, Shinkets RA, Zernhusen BD, Szytek KA;
 PI Edinger S, Gerlach V, Macdougall J, Stone D, Gunther E, Ellerman K;
 XX WPI; 2002-444172/47.
 DR
 XX New NOVX polypeptides and polynucleotides, useful for treating or
 PT preventing a NOVX-associated disorder or a pathological state in a
 PT subject, particularly a human, e.g. cardiomyopathy, atherosclerosis,
 PT cancer or diabetes.
 XX
 PS Example 2; Page 205; 227pp; English.
 XX The present invention describes novel human proteins designated NOVX
 CC (where X is 1, 2a, 2b, 2c, 2d, 3, 4, 5, 6a, 6b, 7, 8, or 9). NOV1 is a
 CC tyrosine-protein kinase 6-like protein; NOV2a-d are keratin 4-like
 CC proteins; NOV3 is a collagen-like protein; NOV4 is a cystatin B-like
 CC protein; NOV5 is a serotonin receptor-like protein; NOV6a and NOV65v are
 CC cold inducible glycoprotein 30-like proteins; NOV7 is a matrilin-2-like
 CC protein; NOV8 is a leukocyte surface antigen (CD53)-like protein; and
 CC NOV9 is a tyrosine kinase-like protein. NOVX sequences have cytostatic,
 CC antiarteriosclerotic, cardiovascular, antidiabetic, immunosuppressive and
 CC neuroprotective activities, and can be used in gene therapy. The NOVX
 CC sequences can be used in therapeutics, particularly for treating,
 CC preventing or alleviating a NOVX-associated disorder or a pathological
 CC state in a subject, particularly a human. These disorders include
 CC cardiomyopathy, atherosclerosis, a disorder related to cell signal
 CC processing and metabolic pathway modulation or diabetes. The NOVX
 CC sequences are also useful for determining the presence of or
 CC predisposition to a disease associated with altered levels of NOVX
 CC polypeptide or nucleic acid, particularly cancer. The NOVX sequences are
 CC especially useful in therapeutic or prophylactic applications for
 CC neoplastic or neurological disorders, and in the treatment of
 CC adenocarcinoma, lymphoma, prostate cancer, uterus cancer, immune
 CC response, AIDS, asthma, Crohn's disease, multiple sclerosis or Graft
 CC versus host disease. The present sequence represents a PCR primer for
 CC human NOV7, which is used in an example from the present invention
 XX
 SQ Sequence 20 BP; 7 A; 1 C; 10 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 1.4e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 854 AGGAGGAGCTGGTGAG 870
 Db 2 AGGAGGAGCTGGAGGAG 18
 RESULT 1222
 ABT21492/c

XX 20-DEC-2002; 2002WO-US041067.
 XX 21-DEC-2001; 2001US-0342644P.
 XX (NOVO) NOVOZYMES BIOTECH INC.
 XX Sloma A, Behr R, Widner W, Tang M, Sternberg D, Brown S;
 XX WPI; 2003-559139/52.
 XX Producing a hyaluronic acid (e.g. for use in eye and joint surgery,
 PT orthopedics, rheumatology or dermatology) comprises cultivating a
 PT Bacillus host cell and recovering the hyaluronic acid from the
 PT cultivation medium.
 XX Example 1; Page 37; 218pp; English.
 XX The invention relates to a novel method which comprises producing a
 CC hyaluronic acid via cultivating a Bacillus host cell under conditions
 CC suitable for production of the hyaluronic acid and subsequently
 CC recovering the hyaluronic acid from the cultivation medium. The most
 CC abundant heteropolysaccharides of the body are the glycosaminoglycans, of
 CC which hyaluronic acid is an example. A number of enzymes are involved in
 CC the biosynthesis of hyaluronic acid including hyaluronan synthase, UDP-
 CC glucose 6-dehydrogenase, UDP-glucose pyrophosphorylase and UDP-N-
 CC acetylglucosamine. The molecules of the invention demonstrate
 CC ophthalmological, antirheumatic and dermatological activities, whilst the
 CC method itself may be useful for producing a hyaluronan in a recombinant
 CC host cell. The hyaluronan generated may be used in eye and joint surgery,
 CC orthopaedics, rheumatology or dermatology and may exhibit further uses
 CC within the fields of adhesion, development, cell motility, cancer,
 CC angiogenesis and wound healing. The current sequence is that of the PCR
 CC primer of the invention which was used during analysis of the enzymes
 CC that play a role in the synthesis of hyaluronic acid
 XX Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 1.4e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1288 GTAGCCGTGAAGATGCT 1304
 Db 17 GTAGCCGTGAAGATGCT 1
 RESULT 1225
 ABT44021
 ID ABT44021 standard; DNA; 20 BP.
 XX ABT44021,
 XX 17-OCT-2003 (first entry)
 DT PCR primer 14 used to sequence Bacillus subtilis Tuad DNA.
 DE Hyaluronic acid; glycosaminoglycan; hyaluronan synthase; antirheumatic;
 KW UDP-glucose 6-dehydrogenase; UDP-glucose pyrophosphorylase; orthopaedic;
 KW UDP-N-acetylglucosamine; ophthalmological; dermatological; joint surgery;
 KW eye; rheumatology; dermatology; adhesion; development; cell motility;
 KW cancer; angiogenesis; wound healing; ss; PCR; primer.
 XX Bacillus subtilis subsp. subtilis str. 168.
 OS WO2003054163-A2.
 PN 03-JUL-2003.
 PD 20-DEC-2002; 2002WO-US041067.
 XX 21-DEC-2001; 2001US-0342644P.
 PR

PA (NOVO) NOVOZYMES BIOTECH INC.
 XX Sloma A, Behr R, Widner W, Tang M, Sternberg D, Brown S;
 XX WPI; 2003-559139/52.
 XX Producing a hyaluronic acid (e.g. for use in eye and joint surgery,
 PT orthopedics, rheumatology or dermatology) comprises cultivating a
 PT Bacillus host cell and recovering the hyaluronic acid from the
 PT cultivation medium.
 XX Example 1; Page 37; 218pp; English.
 XX The invention relates to a novel method which comprises producing a
 CC hyaluronic acid via cultivating a Bacillus host cell under conditions
 CC suitable for production of the hyaluronic acid and subsequently
 CC recovering the hyaluronic acid from the cultivation medium. The most
 CC abundant heteropolysaccharides of the body are the glycosaminoglycans, of
 CC which hyaluronic acid is an example. A number of enzymes are involved in
 CC the biosynthesis of hyaluronic acid including hyaluronan synthase, UDP-
 CC glucose 6-dehydrogenase, UDP-glucose pyrophosphorylase and UDP-N-
 CC acetylglucosamine. The molecules of the invention demonstrate
 CC ophthalmological, antirheumatic and dermatological activities, whilst the
 CC method itself may be useful for producing a hyaluronan in a recombinant
 CC host cell. The hyaluronan generated may be used in eye and joint surgery,
 CC orthopaedics, rheumatology or dermatology and may exhibit further uses
 CC within the fields of adhesion, development, cell motility, cancer,
 CC angiogenesis and wound healing. The current sequence is that of the PCR
 CC primer of the invention which was used during analysis of the enzymes
 CC that play a role in the synthesis of hyaluronic acid
 XX Sequence 20 BP; 4 A; 3 C; 5 G; 8 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 1.4e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1288 GTAGCCGTGAAGATGCT 1304
 Db 4 GTAGCCGTGAAGATGCT 20
 RESULT 1226
 ADD00996/c
 ID ADD00996 standard; DNA; 20 BP.
 XX ADD00996;
 AC ADD00996;
 XX 01-JAN-2004 (first entry)
 DT Human Jagged 2 chimeric phosphorothioate oligonucleotide SEQ ID NO:51.
 DE apoptosis; Jagged 2 inhibitor; cytostatic; hyperproliferative disorder;
 KW human; ss; antisense oligonucleotide; phosphorothioate;
 KW 2'-O-methoxyethyl.
 XX Synthetic.
 OS Homo sapiens.
 XX Key Location/Qualifiers
 FT modified_base 1..20
 FT /mod_base= b
 FT /note= "phosphorothioate linkages, where all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT

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XX WO2003077848-A2.
XX
XX
XX 25-SEP-2003.
XX
XX 10-MAR-2003; 2003WO-US007340.
XX
XX 12-MAR-2002; 2002US-00096399.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Koller E, Shapard PJ;
XX
XX WPI; 2003-756943/71.
XX
XX
XX The present invention describes a method for inducing apoptosis in a cell
XX or animal comprising administering to a cell or animal a Jagged 2
XX inhibitor to reduce Jagged 2 levels or activity. Also described: (1)
XX treating a subject having a disease or condition associated with
XX insufficient apoptosis by administration of a Jagged 2 inhibitor; (2) a
XX pharmaceutical composition comprising a Jagged 2 inhibitor and another
XX active ingredient for inducing apoptosis; and (3) a kit comprising a
XX Jagged 2 inhibitor and instructions for using the Jagged 2 inhibitor in
XX the induction of apoptosis. The Jagged 2 inhibitor has cytostatic
XX activity. The method can be used for inducing apoptosis in a cell or
XX animal for treating a subject having a disease or condition associated
XX with insufficient apoptosis, e.g., hyperproliferative disorder. The
XX present sequence represents a human Jagged 2 chimeric phosphorothioate
XX antisense oligonucleotide, which is used in an example from the present
XX invention.
XX
XX Sequence 20 BP; 2 A; 8 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.4%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 1.4e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX
XX 1542 CACCTTCAAGGACCTGG 1558
XX ||||| ||||| |||||
XX 17 CACCTGCAAGGACCTGG 1
XX
XX
XX RESULT 1227
XX ADC98542/c
XX ID ADC98542 standard; DNA; 20 BP.
XX
XX AC ADC98542;
XX
XX 01-JAN-2004 (first entry)
XX
XX OMD_01 polymorphism marker PCR primer S primer seq.
XX
XX low bone mineral density; BMD; bone damage; polymorphism; osteoporosis;
XX single nucleotide polymorphism; SNP; PCR primer; ss; human.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX WO2003054218-A2.
XX
XX 03-JUL-2003.
XX
XX 19-DEC-2002; 2002WO-US040948.
XX
XX 20-DEC-2001; 2001US-0342711P.
XX
XX 04-NOV-2002; 2002US-0423559P.
XX
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XX (INCY-) INCYTE GENOMICS INC.
XX
XX Jones KA, Valdes A, Townley DJ, Mangion J, Galwey N, Bennett S;
XX McKay I, Schafer A;
XX
XX WPI; 2003-559156/52.
XX
XX Determining whether an individual is predisposed to susceptibility to low
XX bone mineral density (BMD) and/or bone damage, involves identifying
XX polymorphisms in associated genes.
XX
XX Example 8; Page 239; 246pp; English.
XX
XX The present invention describes a method of determining whether an
XX individual is predisposed to susceptibility to low bone mineral density
XX (BMD) and/or bone damage comprising identifying whether the individual
XX has at least one polymorphism in a polynucleotide encoding a protein,
XX where the polynucleotide is one of 81 200-500 nucleotide sequences (S1,
XX see ADC98235 to ADC98315). An agent identified in an method from the
XX present invention which can be used for the prevention or treatment of a
XX disease resulting in susceptibility to low BMD and/or bone damage is
XX useful in the manufacture of a medicament for use in modulating the
XX susceptibility to low BMD and/or bone damage. The disease associated with
XX low BMD and/or bone damage is osteoporosis. The present PCR primer
XX sequence is used in the exemplification of the present invention.
XX
XX Sequence 20 BP; 13 A; 1 C; 0 G; 6 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.4%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 1.4e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX
XX 3117 TTAAATTTTAACTTATT 3133
XX ||||| ||||| |||||
XX 18 TTAAATTTTAACTTATT 2
XX
XX
XX RESULT 1228
XX ADF73003/c
XX ID ADF73003 standard; DNA; 20 BP.
XX
XX AC ADF73003;
XX
XX 26-FEB-2004 (first entry)
XX
XX Probe related to the invention #61.
XX
XX tubercle bacillus gene chip; ss; probe.
XX
XX Synthetic.
XX
XX CN1362526-A.
XX
XX 07-AUG-2002.
XX
XX 05-JAN-2001; 2001CN-00107010.
XX
XX 05-JAN-2001; 2001CN-00107010.
XX
XX (BAOL/) BAO L.
XX
XX Bao L, Zhang W, Wang X;
XX
XX WPI; 2003-240333/24.
XX
XX A tubercle bacillus gene chip useful for tuberculosis diagnosis and
XX reasonable selection of medicine.
XX
XX Disclosure; SEQ ID NO 61; 4pp; Chinese.
XX
XX The present sequence represents a tubercle bacillus gene chip and its
XX application. According to the characteristics of tubercle bacillus genome
XX
```

CC sequence and molecular mechanism produced by tubercle bacillus resistance
CC to drug, and according to its application the probe can be designed and
CC selected, and the probe array can be regularly and reasonable arranged
CC according to a certain mode to form optimized probe array. The gene chip
CC can be used for quickly, accurately and high-efficiency identifying
CC tubercle bacillus, and can be used for screening and detecting its
CC resistance to drug, and can detect the mutation of specific site of
CC tubercle bacillus gene sequence and the mutation of non-specific site.
CC The invention can be used for tuberculosis diagnosis and reasonable
CC selection of medicine. The present sequence represents a probe related to
CC the invention.
XX
SQ Sequence 20 BP; 3 A; 9 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 836 TGGTGGTGCTGCCAGCC 852
|||||
DB 20 TGGTGGCTGCCAGCC 4

RESULT 1239
ADH62956/c
ID ADH62956 standard; DNA; 20 BP.
XX
AC ADH62956;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human Jagged 2 antisense oligonucleotide ISIS #148740.
XX
KW Antisense; Jagged 2; hyperproliferative disorder; cancer;
XX developmental disorder; apoptosis; prophylaxis; antisense therapy;
XX phosphorothioate; human; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX

Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone where all cytidines are
FT 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

US2003170636-A1.
XX
PD 11-SEP-2003.
XX
XX 05-MAR-2002; 2002US-00091625.
PF
XX
XX 05-MAR-2002; 2002US-00091625.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Freier SM;
PI
XX WPI; 2003-898250/82.
DR

XX New antisense oligonucleotides for modulating Jagged 2 expression, useful
PT for diagnosing, preventing or treating diseases or conditions associated
PT with Jagged 2, e.g. cancer or developmental disorders.
XX

PS Claim 3; SEQ ID NO 51; 63pp; English.
XX
CC The invention relates to novel antisense compounds targetted to a nucleic
CC acid molecule encoding Jagged 2 to inhibit its expression. Antisense
CC compounds of the invention are useful for treating an animal having a
CC disease or condition associated with Jagged 2, e.g. hyperproliferative
CC disorder (particularly cancer), a developmental disorder or a disease or
CC condition that arises from aberrant apoptosis. They are also used for
CC diagnostics, prophylaxis or as research reagents or kits. The invention
CC is also useful in antisense therapy. The present sequence is an antisense
CC oligonucleotide targetted to human Jagged 2 DNA. This sequence is used in
CC the exemplification of the invention.
XX
SQ Sequence 20 BP; 2 A; 8 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1542 CACCTTCAAGGACCTGG 1558
|||||
DB 17 CACCTGCAAGGACCTGG 1

RESULT 1230
ADH57111/c
ID ADH57111 standard; DNA; 20 BP.
XX
AC ADH57111;
XX
DT 25-MAR-2004 (first entry)
XX
DE Phosphorothioate antisense DNA oligo to modulate human Jagged 2 SeqID 51.
XX human; ss; antisense; Jagged 2; differentiation; cell fate; signalling;
XX Usher syndrome type 1a; retinitis pigmentosa; phosphorothioate backbone;
XX 2' MOE wing.
XX
OS Synthetic.
OS Homo sapiens.
XX

Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
XX

US2003207839-A1.
XX
XX 06-NOV-2003.
PD
XX
XX 13-JUN-2003; 2003US-00461668.
PF
XX
XX 05-MAR-2002; 2002US-00091625.
PR
XX
XX (FREI/) FREIER S M.
PA
XX
XX Freier SM;
PI
XX WPI; 2003-864795/80.
DR
XX New antisense oligonucleotides of 8-40 nucleobases, useful for modulating
PT the function of nucleic acid molecules encoding Jagged 2, ultimately
PT

modulating the amount of Jagged 2 produced.

Claim 3; SEQ ID NO 51; 63pp; English.

This invention relates to novel antisense compounds that can be used to modulate the expression of Jagged 2. Specifically, it refers to compositions useful for inhibiting the expression of Jagged 2, a human homologue of the Drosophila Serrate gene, which is involved in differentiation and cell fate, as well as positive feedback control over signalling genes such as Notch 1, Notch 3 and Jagged 1. The Jagged 2 gene is located on chromosome 14q32, a region that has been implicated in genetic diseases including Usher syndrome type 1a that is associated with retinitis pigmentosa. The present invention describes antisense oligonucleotides that comprise at least one modified sugar moiety, a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-methylcytosine. These compounds are useful for modulating the function of nucleic acid molecules encoding Jagged 2, ultimately modulating the amount of Jagged 2 produced, which in turn is useful for research reagents and in diagnostics. This oligonucleotide sequence is a phosphorothioate antisense DNA oligo used to modulate human Jagged 2 expression in an exemplification of the invention.

Sequence 20 BP; 2 A; 8 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. NO. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

1542 CACCTTCAGGACCTGG 1558
17 CACCTGCAAGGACCTGG 1

RESULT 1231
ABZ99247/C
ID ABZ99247 standard; DNA; 20 BP.
XX
AC ABZ99247;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human PBE4C oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 14489; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. NO. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

1884 CTTCAAGCTGCTCAGG 1900
20 CTTCAAGCTGCTCAGG 4

RESULT 1232
ABZ91972/C
ID ABZ91972 standard; DNA; 20 BP.
XX
AC ABZ91972;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 7214; 872pp; English.


```

XX PA (EPIG-) EPIGENESIS PHARM INC.
XX PI NYce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
XX PI Miller S, Tang L, Shahabuddin S;
XX XX WPI; 2003-093058/08.
XX XX
XX PT Pharmaceutical composition for treating asthma, has antisense
XX PT oligonucleotide containing less percentage of adenosine, targeted to
XX PT nucleic acids associated with lung airway or lung dysfunction, and
XX PT bronchodilating-agent.
XX XX
XX PS Claim 15; SEQ ID NO 7214; 763pp; English.
XX XX
XX CC This invention describes a novel composition (a) a first active agent,
XX CC comprising oligonucleotides, effective for alleviating
XX CC bronchoconstriction, respiratory tract inflammation, allergies and
XX CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX CC surfactant depletion or hyposecretion, when administered to a mammal. The
XX CC oligonucleotides are derived from a gene encoding or regulating
XX CC expression of a target polypeptide associated with lung airway or lung
XX CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX CC The invention also describes a kit, that comprises: (a) a delivery
XX CC device, in separate containers, (b) the oligonucleotides, (c)
XX CC instructions for adding a carrier and for use of the kit. The composition
XX CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX CC beta-adrenergic agonist. The composition is useful for preventing or
XX CC treating a respiratory, lung or malignant disease. The administered
XX CC composition comprises oligo and is administered to reduce the production
XX CC or availability, or to increase the degradation of the target mRNA or to
XX CC reduce the amount of target polypeptide present in the lungs. The
XX CC pulmonary obstruction, and/or bronchoconstriction and/or lung
XX CC inflammation, allergies and/or surfactant hypoproduction are associated
XX CC with a disease or condition such as pulmonary vasoconstriction,
XX CC inflammation, allergies, asthma, impeded respiration, respiratory
XX CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX CC transplantation rejection, pulmonary infections, bronchitis or cancer.
XX CC The reduced adenosine content of the anti-sense oligos corresponding to
XX CC thymidines present in the target RNA serves to prevent the breakdown of
XX CC the oligonucleotides into products that free adenosine into the system
XX CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX CC prevent any unwanted effects due to it
XX XX
XX SQ Sequence 20 BP; 12 A; 3 C; 0 G; 3 T; 0 U; 2 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. NO. 1.4e+03;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3316 TTTAGGAGATTATTTT 3334
Db ||||| |||||
20 TTTAGGAGATTATTTT 2

RESULT 1235
ADI38799/c
ID ADI38799 standard; DNA; 20 BP.
XX AC ADI38799;
XX AC ADI38799;
XX DT 22-APR-2004 (first entry)
XX DE Human LIM domain kinase 1 antisense oligonucleotide #83.
XX XX neuroprotective; LIM domain kinase 1; developmental disorder;
XX KW neurological disorder; diagnostic; prophylaxis; human; ss.
XX XX Homo sapiens.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers

FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT modified_base 15..20
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX XX
XX PN US2004014047-A1.
XX XX
XX PD 22-JAN-2004.
XX XX
XX PF 18-JUL-2002; 2002US-00199199.
XX XX
XX PR 18-JUL-2002; 2002US-00199199.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Cowser LM, Dobie KW;
XX XX
XX PF 2004-121553/12.
XX XX
XX CC New antisense oligonucleotides for modulating LIM domain kinase 1
XX CC expression, useful for diagnosing, preventing or treating conditions
XX CC associated with the kinase, e.g. neurological or developmental disorders.
XX PS Example 15; SEQ ID NO 98; 81pp; English.
XX XX
XX CC The invention describes a compound 8-80 nucleobases in length targeted to
XX CC a nucleic acid molecule encoding LIM domain kinase 1. The compound
XX CC specifically hybridizes with the nucleic acid molecule encoding LIM
XX CC domain kinase 1 and inhibits the expression of LIM domain kinase 1. It
XX CC specifically hybridizes with at least an 8-nucleobase portion of a
XX CC preferred target region on the nucleic acid molecule encoding LIM domain
XX CC kinase 1. The antisense oligonucleotide is useful for modulating the
XX CC expression of LIM domain kinase 1 in cells or tissues to treat diseases
XX CC associated with their expression, such as a developmental disorder or a
XX CC neurological disorder. In addition, the compound is used for diagnostics,
XX CC prophylaxis, or as research reagents or kits. This sequence represents a
XX CC human LIM domain kinase 1 antisense oligonucleotide.
XX XX
XX SQ Sequence 20 BP; 6 A; 3 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. NO. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2382 TCTTGCTCCAGTGCA 2398
Db ||||| |||||
19 TCTTGCTCCAGTGCA 3

RESULT 1236
ADI38722
ID ADI38722 standard; DNA; 20 BP.
XX AC ADI38722;
XX AC ADI38722;
XX DT 22-APR-2004 (first entry)
XX XX Human LIM domain kinase 1 antisense oligonucleotide #6.
XX XX neuroprotective; LIM domain kinase 1; developmental disorder;
XX KW neurological disorder; diagnostic; prophylaxis; human; ss.
XX XX Homo sapiens.
XX OS Homo sapiens.
XX FH Key

```

```

FH Key      Location/Qualifiers
FT modified_base 1..20
FT FT      /*tag= b
FT FT      /mod_base= OTHER
FT FT      /note= "OTHER= Phosphorothioate backbone. All cytidines
FT FT      are 5-methylcytidines"
FT modified_base 1..5
FT FT      /*tag= a
FT FT      /mod_base= OTHER
FT FT      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT FT      /*tag= c
FT FT      /mod_base= OTHER
FT FT      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX US2004014047-A1.
XX 22-JAN-2004.
XX 18-JUL-2002; 2002US-00199199.
XX PF
XX 18-JUL-2002; 2002US-00199199.
XX PR
XX (ISIS-) ISIS PHARM INC.
XX PA
XX Cowsett LM, Dobie KW;
XX PI
XX WPI; 2004-121553/12.
XX DR
XX New antisense oligonucleotides for modulating LIM domain kinase 1
XX FT      expression, useful for diagnosing, preventing or treating conditions
XX FT      associated with the kinase, e.g. neurological or developmental disorders.
XX PT
XX Example 15; SEQ ID NO 21; 81pp; English.
XX PS
XX The invention describes a compound 8-80 nucleobases in length targeted to
XX CC      a nucleic acid molecule encoding LIM domain kinase 1. The compound
XX CC      specifically hybridizes with the nucleic acid molecule encoding LIM
XX CC      domain kinase 1 and inhibits the expression of LIM domain kinase 1. It
XX CC      specifically hybridizes with at least an 8-nucleobase portion of a
XX CC      preferred target region on the nucleic acid molecule encoding LIM domain
XX CC      kinase 1. The antisense oligonucleotide is useful for modulating the
XX CC      expression of LIM domain kinase 1 in cells or tissues to treat diseases
XX CC      associated with their expression, such as a developmental disorder or a
XX CC      neurological disorder. In addition, the compound is used for diagnostics,
XX CC      prophylaxis, or as research reagents or kits. This sequence represents a
XX CC      human LIM domain kinase 1 antisense oligonucleotide.
XX SQ      Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

      Query Match      0.4%; Score 15.4; DB 1; Length 20;
      Best Local Similarity 94.1%; Pred. No. 1.4e+03;
      Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2382 TCTTGCTCCAGGTGCA 2398
      |||||
Db      2 TCTTCCCTCCAGGTGCA 18

RESULT 1237
ADJ61132/C
ID      ADJ61132 standard; DNA; 20 BP.
XX
XX ADJ61132;
AC
XX
XX 06-MAY-2004 (first entry)
DT
DE      Oligonucleotide associated to PDE4C #198.
XX
XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
XX KW      airway inflammation; allergy; asthma; impeded respiration;
XX KW      cystic fibrosis; acute respiratory distress syndrome;
XX KW      pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;

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KW ss.
XX Homo sapiens.
XX OS
XX WO2004011613-A2.
XX PN
XX 05-FEB-2004.
XX PD
XX 25-JUL-2003; 2003WO-US023509.
XX PF
XX 29-JUL-2002; 2002US-0399076P.
XX PR
XX (EPIC-) EPICENESIS PHARM INC.
XX PA
XX Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
XX PI      Shahabuddin S, Lu H, Cong H;
XX PI
XX WPI; 2004-203534/19.
XX DR
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
XX PT      initiation codons and introns of respiratory disease-relevant genes e.g.,
XX PT      CCRI, RANTES, MCP4, useful for prophylaxis or treating respiratory
XX PT      disease e.g., asthma.
XX FT
XX Claim 2; SEQ ID NO 1988; 85pp; English.
XX PS
XX The present invention relates to an oligonucleotide anti-sense to e.g.,
XX CC      initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
XX CC      end of nucleic acid target comprising gene(s) chosen from e.g.
XX CC      interleukin (IL)-4 receptor, IL-5 receptor or salts of the
XX CC      oligonucleotide and optionally surfactant operatively linked to the
XX CC      oligonucleotide. The method is useful for preventing or treating a
XX CC      respiratory or lung disease, which involves administering to the airways
XX CC      of a subject an effective amount of an inhibitor. The oligonucleotide is
XX CC      useful for production of a medicament for the prevention and/or treatment
XX CC      of a respiratory or lung disease. The respiratory or lung disease is
XX CC      chosen from airway inflammation, allergy(ies), asthma, impeded
XX CC      respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
XX CC      (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
XX CC      (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
XX CC      obstruction. The present sequence represents an oligonucleotide of the
XX CC      invention.
XX SQ      Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

      Query Match      0.4%; Score 15.4; DB 1; Length 20;
      Best Local Similarity 94.1%; Pred. No. 1.4e+03;
      Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1884 CTTCAAGCTGCTGAAGG 1900
      |||||
Db      20 CTTCAAGCTGCTGACG 4

RESULT 1238
ADJ38760
ID      ADJ38760 standard; DNA; 20 BP.
XX
XX ADJ38760;
AC
XX
XX 06-MAY-2004 (first entry)
DT
DE      Human resistin antisense oligonucleotide seq id 149.
XX
XX antidiabetic; anorectic; cardiant; antiarteriosclerotic;
XX KW      resistin inhibitor; resistin; metabolic disease; diabetes; obesity;
XX KW      atherosclerosis; antisense technology; human; antisense oligonucleotide;
XX KW      ss.
XX
XX Homo sapiens.
XX OS
XX Key      Location/Qualifiers
XX FT      modified_base 1..20

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FT FT      /*tag= b'
FT FT      /mod_base= OTHER
FT FT      /note= "OTHER= Phosphorothioate backbone. All cytidines
FT FT      are 5-methylcytidines"
FT FT      modified_base
FT FT      1. .5
FT FT      /*tag= a
FT FT      /mod_base= OTHER
FT FT      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT FT      15. .20
FT FT      /*tag= c
FT FT      /mod_base= OTHER
FT FT      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN US2004023383-A1.
XX
PD 05-FEB-2004.
XX
XX 31-JUL-2002; 2002US-00210833.
XX
XX 31-JUL-2002; 2002US-00210833.
PR
XX (ISIS-) ISIS PHARM INC.
XX
XX Bhanot S, Freier SM;
XX
XX WPI; 2004-142664/14.
DR
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding resistin, useful for treating a metabolic disorder,
XX e.g. diabetes or obesity, or atherosclerosis.
XX
XX Example 15; SEQ ID NO 149; 75pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding resistin, and inhibits the expression of resistin. The compound,
XX composition and methods are useful for treating a disease or condition
XX associated with resistin, such as a metabolic disease, e.g. diabetes or
XX obesity, or atherosclerosis. They are also useful in research and
XX diagnostics for modulating the expression of resistin. This sequence
XX represents a human resistin antisense oligonucleotide.
XX
XX Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1352 TGGAGATGATGAAGATG 1368
DB 4 TGGAGATGATGATGATG 20

RESULT 1239
ADJ38661/C
ID ADJ38661 standard; DNA; 20 BP.
XX
XX AC ADJ38661;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human resistin antisense oligonucleotide seq id 50.
DE
XX antidiabetic; anorectic; cardiatic; antiarteriosclerotic;
XX resistin inhibitor; resistin; metabolic disease; diabetes; obesity;
XX atherosclerosis; antisense technology; human; antisense oligonucleotide;
XX ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1. .20
FT /*tag= b

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FT FT      /mod_base= OTHER
FT FT      /note= "OTHER= Phosphorothioate backbone. All cytidines
FT FT      are 5-methylcytidines"
FT FT      modified_base
FT FT      1. .5
FT FT      /*tag= a
FT FT      /mod_base= OTHER
FT FT      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT FT      15. .20
FT FT      /*tag= c
FT FT      /mod_base= OTHER
FT FT      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN US2004023383-A1.
XX
PD 05-FEB-2004.
XX
XX 31-JUL-2002; 2002US-00210833.
XX
XX 31-JUL-2002; 2002US-00210833.
PR
XX (ISIS-) ISIS PHARM INC.
XX
XX Bhanot S, Freier SM;
XX
XX WPI; 2004-142664/14.
DR
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding resistin, useful for treating a metabolic disorder,
XX e.g. diabetes or obesity, or atherosclerosis.
XX
XX Example 15; SEQ ID NO 50; 75pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding resistin, and inhibits the expression of resistin. The compound,
XX composition and methods are useful for treating a disease or condition
XX associated with resistin, such as a metabolic disease, e.g. diabetes or
XX obesity, or atherosclerosis. They are also useful in research and
XX diagnostics for modulating the expression of resistin. This sequence
XX represents a human resistin antisense oligonucleotide.
XX
XX Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1352 TGGAGATGATGAAGATG 1368
DB 17 TGGAGATGATGATGATG 1

RESULT 1240
ADK79424/C
ID ADK79424 standard; DNA; 20 BP.
XX
XX AC ADK79424;
XX
XX 20-MAY-2004 (first entry)
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #6758.
DE
XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX diabetic neuropathy; arthritic pain; migraine headache;
XX infantile epilepsy; ataxia; ss.
XX
XX Synthetic.
XX
XX WO2004016754-A2.
XX
XX 26-FEB-2004.
PD
XX 14-AUG-2003; 2003WO-US025465.
PF

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XX 14-AUG-2002; 2002US-0403416P.
XX (PHAA ) PHARMACIA CORP.
XX Robertds SL;
PI
XX WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 6758; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
XX Sequence 20 BP; 11 A; 2 C; 3 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3260 GATATTTTATTTGCTTT 3276
DB 20 GATATTTTATTTGCTTT 4
RESULT 1241
ADK79423/C
ID ADK79423 standard; DNA; 20 BP.
XX
XX ADK79423;
AC
XX 20-MAY-2004 (first entry)
DT
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #6757.
DE
XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
XX Synthetic.
OS
XX WO2004016754-A2.
PN
XX 26-FEB-2004.
PD
XX 14-AUG-2003; 2003WO-US025465.
PF
XX 14-AUG-2002; 2002US-0403416P.
PR
XX (PHAA ) PHARMACIA CORP.
PA
XX Robertds SL;
PI
XX WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 6757; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
XX Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3260 GATATTTTATTTGCTTT 3276
DB 18 GATATTTTATTTGCTTT 2
RESULT 1242
ADK79287/C
ID ADK79287 standard; DNA; 20 BP.
XX
XX ADK79287;
AC
XX 20-MAY-2004 (first entry)
DT
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #6621.
DE
XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
XX Synthetic.
OS
XX WO2004016754-A2.
PN
XX 26-FEB-2004.
PD
XX 14-AUG-2003; 2003WO-US025465.
PF
XX 14-AUG-2002; 2002US-0403416P.
PR
XX (PHAA ) PHARMACIA CORP.
PA
XX Robertds SL;
PI
XX WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 6621; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
```

CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2' MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.

XX Sequence 20 BP; 12 A; 2 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 1.4e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3260 GATATTTTATTTGCTTT 3276

Db ||||| 19 GATATTTTATTTGCTTT 3

RESULT 1243

ADK79881/c

ID ADK79881 standard; DNA; 20 BP.

XX AC ADK79881;

XX DT 20-MAY-2004 (first entry)

XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #7215.

XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX Synthetic.

OS WO2004016754-A2.

PN 26-FEB-2004.

XX 14-AUG-2003; 2003WO-US025465.

XX 14-AUG-2002; 2002US-0403416P.

XX (PHAA) PHARMACIA CORP.

XX Roberds SL;

XX WPI; 2004-203785/19.

XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.

PS Claim 4; SEQ ID NO 7215; 417pp; English.

XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2' MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.

XX SQ Sequence 20 BP; 12 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 1.4e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3260 GATATTTTATTTGCTTT 3276

Db ||||| 17 GATATTTTATTTGCTTT 1

RESULT 1244

ADO09378/c

ID ADO09378 standard; DNA; 20 BP.

XX AC ADO09378;

XX DT 01-JUL-2004 (first entry)

XX DE Novel human protein Nov3 probe segid 72.

XX cytostatic; antidiabetic; anorectic; cerebroprotective; neuroprotective;
KW antiinflammatory; thyromimetic; gene therapy; diabetes therapy;
KW NOVX polypeptide related disorder; cancer; diabetes; obesity;
KW endocrine disorder; CNS disorder; inflammatory disorder;
KW chromosome mapping; tissue typing; predictive medicine;
KW intracellular protein-like protein; sorting nexin 6-like protein;
KW 231003841781K membrane protein-like protein;
KW 5730451091K cyclin-like protein; cMOS5 cancer specific protein;
KW LRP16 protein-like protein;
KW phosphatidylethanolamine-binding protein-like protein;
KW immunoglobulin-like LRR-domain containing protein;
KW NUMB binding protein LNXp80-like protein;
KW zinc finger protein-like protein;
KW actin-binding protein alpha-like protein;
KW actin-binding protein frabin-alpha-like protein;
KW actin related protein 2/3 complex subunit 1A-like protein;
KW hepatocellular carcinoma autoantigen-like protein;
KW haematopoietic stem/progenitor cells protein MDS029-like protein;
KW TRAP-delta-like protein;
KW INTSIG-5-like WD-40 repeats containing protein-like protein;
KW ferritin light chain-like protein; leucine-rich protein 130-like protein;
KW tumour protein p53-binding protein 2-like protein; human; probe; ss.

XX Homo sapiens.

XX US2004014058-A1.

XX 22-JAN-2004.

XX 01-OCT-2002; 2002US-00262445.

XX 05-OCT-2001; 2001US-0327454P.

XX 09-OCT-2001; 2001US-0327917P.

XX 09-OCT-2001; 2001US-0328029P.

XX 09-OCT-2001; 2001US-0328056P.

XX 12-OCT-2001; 2001US-0328849P.

XX 15-OCT-2001; 2001US-0329414P.

XX 17-OCT-2001; 2001US-0330142P.

XX 22-OCT-2001; 2001US-0341058P.

XX 24-OCT-2001; 2001US-0343629P.

XX 29-OCT-2001; 2001US-0349575P.

XX 01-NOV-2001; 2001US-0346357P.

XX 25-JUN-2002; 2002US-0391342P.

XX (ALSO/) ALSOBROOK J P.

XX (BURG/) BURGESS C E.

XX (CATT/) CATTERTON E.

XX (CHAN/) CHANT J S.

XX (CHAU/) CHAUDHURI A.

XX (EDIN/) EDINGER S.

XX (GERL/) GERLACH V.


```
Query Match      0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2316 TCTGTGTGTGTGTGT 2332
Db 17 TCCGTGTGTGTGTGTGT 1

RESULT 1246
ADM15017/c
ID ADM15017 standard; DNA; 20 BP.
XX
AC ADM15017;
XX
DT 01-JUL-2004 (first entry)
XX
DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1204.
XX
KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
PN WO2004028458-A2.
XX
PD 08-APR-2004.
XX
PP 25-SEP-2003; 2003WO-US030374.
XX
PR 25-SEP-2002; 2002US-0413549P.
XX
PA (PHAA ) PHARMACIA CORP.
XX
PI Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
DR New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
PS Claim 4; SEQ ID NO 1204; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
```

```
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 8 A; 8 C; 3 G; 1 T; 0 U; 0 Other;
XX
Query Match      0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2334 CCGTGTGTGTGTGTGT 2350
Db 17 CCGTGTGTGTGTGTGT 1

RESULT 1247
ADM15408/c
ID ADM15408 standard; DNA; 20 BP.
XX
AC ADM15408;
XX
DT 01-JUL-2004 (first entry)
XX
DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1595.
XX
KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
PN WO2004028458-A2.
XX
PD 08-APR-2004.
XX
PP 25-SEP-2003; 2003WO-US030374.
XX
PR 25-SEP-2002; 2002US-0413549P.
XX
PA (PHAA ) PHARMACIA CORP.
XX
```

PI Gierse JK;
XX WPI; 2004-305094/28.
XX
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX
XX Claim 4; SEQ ID NO 1595; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridize with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antiinflammatory, neuroprotective, cardiant, neuroprotective,
CC antiinflammatory, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 9 A; 8 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2334 CGTGTGTGTGTGTGTGT 2350
Db 20 CGTGTGTGTGTGTGTGT 4

RESULT 1248
ADM15146/c
ID ADM15146 standard; DNA; 20 BP.
XX
XX ADM15146;
XX
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1333.
DE
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW immunomodulatory; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
OS Synthetic.
OS
XX
XX
XX Key Location/Qualifiers
PH modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT

FT modified_base /note= "2'-O-methoxyethyls"
FT 16..20
FT *tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA) PHARMACIA CORP.
XX Gierse JK;
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX Claim 4; SEQ ID NO 1333; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridize with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antiinflammatory, neuroprotective, cardiant, neuroprotective,
CC antiinflammatory, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 9 A; 7 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2334 CGTGTGTGTGTGTGTGT 2350
Db 19 CGTGTGTGTGTGTGTGT 3

RESULT 1249
ADM15000/c
ID ADM15000 standard; DNA; 20 BP.
XX
XX ADM15000;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1187.
DE
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW immunomodulatory; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW

KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.
 OS Synthetic.

XX Key Location/Qualifiers

FH modified_base 1..20

FT /tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"

FT modified_base 1..5

FT /tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 15..20

FT /tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX Giersee JK;

XX WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid
 encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.

XX Claim 4; SEQ ID NO 1187; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridize with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulator, cardiac, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

SQ Sequence 20 BP; 8 A; 7 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 1.4e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 2334 CGTGTGTGTGTGTGTGT 2350

Db 18 CGTGTGTGTGTGTGTGT 2

RESULT 1250
 ADO46522/c
 ID ADO46522 standard; DNA; 20 BP.

XX AC ADO46522;

XX 15-JUL-2004 (first entry)

XX Human oligonucleotide #1888.

XX Homo sapiens.
 OS US2004049022-A1.
 XX 11-MAR-2004.
 XX 25-JUL-2003; 2003US-00627930.
 XX 23-APR-2002; 2002WO-US0131135.
 XX 23-APR-2002; 2002WO-US0131143.
 XX (NYCE/) NYCE J W.
 XX (SAND/) SANDRASAGRA A.
 XX (TANG/) TANG L.
 XX (AGUI/) AGUILAR D.
 XX (MILL/) MILLER S.
 XX (SHAH/) SHAHABUDDIN S.
 XX (LUHH/) LU H.
 XX (CONG/) CONG H.

XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;

XX WPI; 2004-293804/27.

XX Novel single or multiple target oligonucleotide anti-sense to e.g.
 CC initiation codon, intron of respiratory disease-relevant gene e.g. CCRL1,
 CC RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
 CC asthma.

XX Claim 2; SEQ ID NO 1988; 174pp; English.

XX The invention relates to oligonucleotides anti-sense to an initiation
 CC codon, coding region, 5' or 3' intron-exon junction, intron or region
 CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
 CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
 CC -5 receptor, CCRL1, CCRL3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
 CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
 CC also relates to a method of screening a candidate compound that binds to
 CC one or more nucleic acid target(s) or expressed product(s), for the
 CC prevention and/or treatment of a respiratory or lung disease. The
 CC oligonucleotides are useful for reducing or inhibiting expression of a
 CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
 CC CCRL1, CCRL3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
 CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
 CC useful for preventing or treating a respiratory or lung disease. The
 CC respiratory or lung disease is associated with hyper-responsiveness to
 CC and/or increased levels of, adenosine and/or levels of adenosine A
 CC receptor(s), and/or asthma and/or lung allergies associated with
 CC inflammation or an inflammatory disease. The respiratory or lung disease
 CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
 CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
 CC allergic rhinitis, acute respiratory distress syndrome, pulmonary

CC hypertension, lung inflammation, bronchitis, airway obstruction or
CC bronchoconstriction. This sequence represents an oligonucleotide of the
CC invention.

XX
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1884 CTTCAAGCTGCTGAGG 1900
|||||
DB 20 CTTCAAGCTGCTGAGG 4

RESULT 1251
ADP84328
ID ADP84328 standard; DNA; 20 BP.
XX
AC ADP84328;
XX
DT 23-SEP-2004 (first entry)
XX
DE Fwd PCR primer used for sequencing exon 9b boundary of human GPRA DNA.
XX
KW ss; AST-1; asthma; IGE mediated disease; human; GPRA;
KW G-protein coupled receptor for asthma susceptibility; AAAL;
KW asthma associated alternatively spliced gene 1; primer; PCR;
KW chronic obstructive pulmonary disease; cancer; rhinitis; dermatitis;
KW cytostatic; antiasthmatic; transgenic; asthma locus-1.
XX
OS Homo sapiens.
XX
PN WO2004056866-A1.
XX
PD 08-JUL-2004.
XX
PF 19-DEC-2003; 2003WO-FI000973.
XX
PR 20-DEC-2002; 2002US-0435846P.
PR 03-JAN-2003; 2003US-0437895P.
PR 26-MAR-2003; 2003US-0458767P.
PR 09-JUL-2003; 2003US-0486000P.
XX
PA (GENE-) GENEOS OY.
XX
PI Laitinen T, Kere J, Laitinen LA, Polvi A, Maekelae S, Vendelin J;
PI Pulkkinen V, Salmikangas P;
XX
XX WPI; 2004-500286/47.
XX
PT New GPRA polypeptides, useful in preparing a composition for diagnosing,
PT treating or preventing asthma, other IGE-mediated disease, chronic
PT obstructive pulmonary disease or cancer.
XX
XX
PS Example 7; Page 76; 265pp; English.
XX
CC This invention relates to the identification of a novel susceptibility
CC locus AST-1 for asthma and other IGE mediated diseases mapped to the
CC human chromosome 7p14-p15. Specifically, it refers to two overlapping
CC genes namely GPRA (G-protein coupled receptor for asthma susceptibility)
CC and AAAL (asthma associated alternatively spliced gene 1). The present
CC invention describes identifying single nucleotide polymorphisms, as well
CC as insertion or deletion polymorphisms, occurring at different positions
CC in the AST-1 locus, and furthermore providing vectors, host cells,
CC primers and probes in order to determine the status of an individual.
CC Accordingly, it provides a kit to diagnose or assess predisposition to
CC asthma, chronic obstructive pulmonary disease or cancer and other IGE
CC mediated diseases including rhinitis and dermatitis, such that derived
CC pharmaceutical compositions exhibit cytostatic and antiasthmatic
CC activities. Furthermore, it provides a transgenic animal comprising the
CC asthma locus-1 (AST-1) DNA. This oligonucleotide sequence is a PCR primer
CC used to sequence the exon and exon/ intron boundaries of human GPRA DNA,

CC given in table 5 of the invention.
XX
SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3713 CAGAGTGTCACCCAAA 3729
|||||
DB 2 CAGAGTGTCACCCAAA 18

RESULT 1252
AAZ25089
ID AAZ25089 standard; DNA; 21 BP.
XX
AC AAZ25089;
XX
DT 09-DEC-1999 (first entry)
XX
DE Human MEKK2 PCR primer SEQ ID NO:28.
XX
KW MEKK1; MEKK2; MEKK3; mitogen-activated protein kinase; MAPK; ERK;
KW extracellular regulated kinase; signal transduction; regulation;
KW MAPK/ERK; MEK; MKKK; inflammation; cellular proliferation;
KW differentiation; development; cell death; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9947686-A2.
XX
PD 23-SEP-1999.
XX
PF 15-MAR-1999; 99WO-US005556.
XX
PR 16-MAR-1998; 98US-0078153P.
PR 04-SEP-1998; 98US-0099165P.
XX
PA (CADU-) CADUS PHARM CORP.
XX
PI Johnson GL;
XX
DR WPI; 1999-571843/48.
XX
PT New human MEKK polynucleotides and polypeptides, used for regulating
PT signal transduction in cells.
XX
XX Example 2; Page 64; 159pp; English.
XX
CC The present invention describes human mitogen-activated protein kinase/
CC extracellular response kinase (MAPK/ERK) kinase kinase (MEKK),
CC specifically designated MEKK1, MEKK2 and MEKK3. The MEKK proteins are
CC used to modulate and regulate signal transduction in cells, as well as
CC for regulation of gene transcription in a cell encoding MEKK, where the
CC cell is involved in inflammation, regulation of cellular proliferation
CC and differentiation, regulation of development, regulation of cell death
CC or regulation of inflammation. They are also used to prepare antibodies.
CC MEKK polynucleotides can be used to produce the protein recombinantly and
CC as a source of probes and primers. The present sequence represents a PCR
CC primer for human MEKK2, which is used in an example from the present
CC invention
XX
SQ Sequence 21 BP; 5 A; 3 C; 11 G; 2 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 1.5e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2001 GCAGCTGTGGAGGACC 2017
|||||
DB 1 GGAGCTGTGGAGGACC 17

```

RESULT 1253
ABK89992
ID ABK89992 standard; DNA; 21 BP.
XX
XX
AC ABK89992;
XX
XX 21-OCT-2002 (first entry)
XX
XX Human heavy chain CDR3 variable region, PCR primer VH1-3-5-7.
XX
XX Human; immune response; chronic B-lymphoproliferative disorder; CDR3;
XX complementarity determining region 3; hypervariable region; B-cell;
XX immunoglobulin heavy chain; VH-CDR3; idiotype immunoglobulin;
XX cytotatic; PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX WO200255559-A1.
PN
XX
XX 18-JUL-2002.
PD
XX
XX 15-JAN-2001; 2001WO-IT000014.
PF
XX
XX 15-JAN-2001; 2001WO-IT000014.
PR
XX
XX (FAZI/) FAZIO V M.
PA
XX (SAGLI/) SAGLIO G.
PA
XX Fazio VM, Saglio G;
PI
XX
XX WPI; 2002-583654/62.
DR
XX
XX Use of DNA sequences coding for hypervariable region (VH- complementarity
XX determining region 3 (CDR3)) of idiotype immunoglobulin expressed on B-
XX cells of chronic B- lymphoproliferative disorders, as therapeutic
XX vaccine.
XX
XX Example 2; Fig 1B; 30pp; English.
PS
XX
XX The present invention relates to a method for inducing an immune response
XX against B-lymphoproliferative disorders. The method comprises DNA
XX sequences encoding for the complementarity determining region 3 (CDR3)
XX hypervariable region of immunoglobulin heavy chain (VH-CDR3) alone or in
XX combination with at least another immunomodulating sequence. The DNA
XX sequences are useful as therapeutic vaccines for chronic B-
XX lymphoproliferative disorders in mammals, preferably humans. A
XX recombinant plasmid expression vector containing a DNA sequence of the
XX invention is useful as a therapeutic vaccine or for the manufacture of a
XX vaccine effective against chronic B-lymphoproliferative disorders
XX expressing the surface idiotype immunoglobulin on B-cells in mammals,
XX preferably humans. An efficient, safe and easily reproducible DNA-based
XX immune response against B-lymphoproliferative pathologies can be
XX achieved. The present sequence represents a PCR primer used to amplify
XX human heavy chain CDR3 variable region in the examples of the present
XX invention
XX
XX Sequence 21 BP; 3 A; 3 C; 8 G; 5 T; 0 U; 2 Other;
SQ
Query Match 0.4%; Score 15.4; DB 1; Length 21;
Best Local Similarity 76.2%; Pred. No. 1.5e+03;
Matches 16; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 853 GACGAGGCTGTGGAGGCT 873
DB 1 SAGTGCCAGCTGTGTSAGTCT 21

RESULT 1254
AAL41510
ID AAL41510 standard; DNA; 21 BP.
XX
XX

```

```

AC AAL41510;
XX
XX 19-DEC-2002 (first entry)
XX
XX Phosphatidic acid-prefering phospholipase A1 PCR primer 2.
XX
XX Cytostatic; antiasthmatic; neuroprotective; cardiant; cardiovascular;
XX haematological disorder; phosphatidic acid-prefering phospholipase A1;
XX CNS; genitourinary; asthma; chronic obstructive pulmonary disease;
XX cancer; enzyme; gene therapy; human; PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX WO200266623-A2.
PN
XX
XX 29-AUG-2002.
PD
XX
XX 18-FEB-2002; 2002WO-BP001684.
PF
XX
XX 21-FEB-2001; 2001US-0269856P.
PR
XX 29-JUN-2001; 2001US-0301483P.
PR
XX
XX (FARB ) BAYER AG.
PA
XX
XX Smolyar A;
PI
XX
XX WPI; 2002-674934/72.
DR
XX
XX New polynucleotide encoding a phosphatidic acid-prefering phospholipase
XX A1 polypeptide, useful for treating e.g. CNS, genitourinary,
XX cardiovascular or hematological disorders, and asthma or cancer.
XX
XX Example 6; Page 61; 102pp; English.
PS
XX
XX The invention relates to an isolated polynucleotide comprising a sequence
XX having 2618 bp encoding a phosphatidic acid-prefering phospholipase A1
XX polypeptide comprising a sequence having 872 amino acids or which is at
XX least 88% identical to it; or a fragment, or a variant of the
XX polynucleotide. The pharmaceutical composition comprising the expression
XX vector or the reagent is useful for preparing a medicament for modulating
XX the activity of a phosphatidic acid-prefering phospholipase A1 protein
XX in a disease such as CNS, genitourinary, cardiovascular or haematological
XX disorder, asthma, cancer or chronic obstructive pulmonary disease. The
XX polynucleotide of the invention can also be used in diagnostic assays for
XX detecting diseases or abnormalities, or susceptibility to diseases
XX related to the presence of mutations in the nucleic acid sequences that
XX encode the enzyme. The polynucleotide of the invention can also be used
XX in gene therapy to treat such disorders. This polynucleotide sequence
XX represents a PCR primer of the phosphatidic acid-prefering phospholipase
XX A1 protein of the invention
XX
XX Sequence 21 BP; 2 A; 5 C; 9 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 1.5e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2363 GTGCCGTGTGCTGCG 2379
DB 4 GAGCCGTGTGCTGCG 20

RESULT 1255
ABS67014/C
ID ABS67014 standard; DNA; 21 BP.
XX
XX ABS67014;
AC
XX
XX 29-NOV-2002 (first entry)
DT
XX
XX Human MRP-1 polymorphic DNA region #276.
DE
XX Human; multidrug resistance-associated protein 1; MRP-1; ss; cancer;
XX

```

KW renal cancer; cytostatic; single nucleotide polymorphism.
 XX Homo sapiens.
 OS WO200259142-A2.
 PN
 PT
 XX
 PD 01-AUG-2002.
 XX
 XX 25-JAN-2002; 2002WO-EP000796.
 XX
 XX 26-JAN-2001; 2001EP-00101651.
 XX
 XX (EPID-) EPIDAUS BIOSYSTEMS AG.
 XX
 XX Brinkmann U, Hoffmeyer S, Mornhinweg E;
 XX WPI; 2002-657475/70.
 DR Novel multidrug resistance-associated protein 1 polynucleotide useful for
 XX diagnosis and treatment of cancer and multidrug resistance related
 PT diseases, and for identifying single nucleotide polymorphisms.
 PT
 XX Example 9; Page 84; 198pp; English.
 XX The invention relates to a multidrug resistance-associated protein 1 (MRP
 CC -1) polynucleotide. The polynucleotide is useful in an in vitro method
 CC for identifying a single nucleotide polymorphism and for identifying and
 CC obtaining a pro-drug or drug capable of modulating the activity of a
 CC molecular variant of MRP-1 or for identifying and obtaining an inhibitor
 CC of the activity of a molecular variant of MRP-1. The sequences are useful
 CC for diagnosing a disorder related to the presence of a molecular variant
 CC of MRP-1 or susceptibility to such a disorder, where the disorder is
 CC cancer (particularly renal cancer) or a disease related to multidrug
 CC resistance. This sequence represents a human MRP-1 polymorphic DNA region
 XX
 XX Sequence 21 BP; 5 A; 10 C; 3 G; 2 T; 0 U; 1 Other;
 SQ
 Query Match 0.4%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 1.5e+03;
 Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 XX
 XX 3 GGATGGCACAGGCTGGTG 21
 Db 20 GGATGGCACAGGCTGGTG 2
 RESULT 1256
 ABS67013
 ID ABS67013 standard; DNA; 21 BP.
 AC
 XX ABS67013;
 XX
 XX 29-NOV-2002 (first entry)
 DT
 DE Human MRP-1 polymorphic DNA region #275.
 XX
 XX Human; multidrug resistance-associated protein 1; MRP-1; ss; cancer;
 KW renal cancer; cytostatic; single nucleotide polymorphism.
 KW
 XX Homo sapiens.
 OS
 XX WO200259142-A2.
 PN
 XX 01-AUG-2002.
 XX
 XX 25-JAN-2002; 2002WO-EP000796.
 XX
 XX 26-JAN-2001; 2001EP-00101651.
 XX
 XX (EPID-) EPIDAUS BIOSYSTEMS AG.
 XX
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 CC for identifying a single nucleotide polymorphism and for identifying and
 CC obtaining a pro-drug or drug capable of modulating the activity of a
 CC molecular variant of MRP-1 or for identifying and obtaining an inhibitor
 CC of the activity of a molecular variant of MRP-1. The sequences are useful
 CC for diagnosing a disorder related to the presence of a molecular variant
 CC of MRP-1 or susceptibility to such a disorder, where the disorder is
 CC cancer (particularly renal cancer) or a disease related to multidrug
 CC resistance. This sequence represents a human MRP-1 polymorphic DNA region
 XX
 XX Sequence 21 BP; 5 A; 10 C; 3 G; 2 T; 0 U; 1 Other;
 SQ
 Query Match 0.4%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 1.5e+03;
 Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 XX
 XX 3 GGATGGCACAGGCTGGTG 21
 Db 20 GGATGGCACAGGCTGGTG 2
 RESULT 1256
 ABS67013
 ID ABS67013 standard; DNA; 21 BP.
 AC
 XX ABS67013;
 XX
 XX 29-NOV-2002 (first entry)
 DT
 DE Human MRP-1 polymorphic DNA region #275.
 XX
 XX Human; multidrug resistance-associated protein 1; MRP-1; ss; cancer;
 KW renal cancer; cytostatic; single nucleotide polymorphism.
 KW
 XX Homo sapiens.
 OS
 XX WO200259142-A2.
 PN
 XX 01-AUG-2002.
 XX
 XX 25-JAN-2002; 2002WO-EP000796.
 XX
 XX 26-JAN-2001; 2001EP-00101651.
 XX
 XX (EPID-) EPIDAUS BIOSYSTEMS AG.
 XX
 XX Brinkmann U, Hoffmeyer S, Mornhinweg E;
 XX WPI; 2002-657475/70.
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 XX diagnosis and treatment of cancer and multidrug resistance related
 PT diseases, and for identifying single nucleotide polymorphisms.
 PT
 XX Example 9; Page 84; 198pp; English.
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 CC -1) polynucleotide. The polynucleotide is useful in an in vitro method
 CC for identifying a single nucleotide polymorphism and for identifying and
 CC obtaining a pro-drug or drug capable of modulating the activity of a
 CC molecular variant of MRP-1 or for identifying and obtaining an inhibitor
 CC of the activity of a molecular variant of MRP-1. The sequences are useful
 CC for diagnosing a disorder related to the presence of a molecular variant
 CC of MRP-1 or susceptibility to such a disorder, where the disorder is
 CC cancer (particularly renal cancer) or a disease related to multidrug
 CC resistance. This sequence represents a human MRP-1 polymorphic DNA region
 XX
 XX Sequence 21 BP; 5 A; 10 C; 3 G; 2 T; 0 U; 1 Other;
 SQ

DR WPI; 2002-657475/70.
 XX Novel multidrug resistance-associated protein 1 polynucleotide useful for
 PT diagnosis and treatment of cancer and multidrug resistance related
 PT diseases, and for identifying single nucleotide polymorphisms.
 XX Example 9; Page 84; 198pp; English.
 XX The invention relates to a multidrug resistance-associated protein 1 (MRP
 CC -1) polynucleotide. The polynucleotide is useful in an in vitro method
 CC for identifying a single nucleotide polymorphism and for identifying and
 CC obtaining a pro-drug or drug capable of modulating the activity of a
 CC molecular variant of MRP-1 or for identifying and obtaining an inhibitor
 CC of the activity of a molecular variant of MRP-1. The sequences are useful
 CC for diagnosing a disorder related to the presence of a molecular variant
 CC of MRP-1 or susceptibility to such a disorder, where the disorder is
 CC cancer (particularly renal cancer) or a disease related to multidrug
 CC resistance. This sequence represents a human MRP-1 polymorphic DNA region
 XX
 XX Sequence 21 BP; 2 A; 3 C; 10 G; 5 T; 0 U; 1 Other;
 SQ
 Query Match 0.4%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 1.5e+03;
 Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 3 GGATGGCACAGGCTGGTG 21
 Db 2 GGATGGCACAGGCTGGTG 20
 RESULT 1257
 ADA05905/c
 ID ADA05905 standard; DNA; 21 BP.
 XX
 XX ADA05905;
 AC
 XX
 XX 06-NOV-2003 (first entry)
 DT
 DE Human NOVX probe SEQ ID NO:265.
 DE
 XX human; NOVX; antidiabetic; anorectic; antibacterial; virucide;
 KW immunomodulator; cytostatic; neurotropic; neuroprotective;
 KW antiparkinsonian; antipalemic; gene therapy; human disease;
 KW metabolic disorder; diabetes; obesity; infection; cachexia; cancer;
 KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
 KW immune disorder; haematopoietic disorder; dyslipidaemia; probe; ss.
 KW
 XX Synthetic.
 OS Homo sapiens.
 OS
 XX WO2003029424-A2.
 PN
 XX 10-APR-2003.
 PD
 XX 02-OCT-2002; 2002WO-US031373.
 PF
 XX 02-OCT-2001; 2001US-0326483P.
 PR 05-OCT-2001; 2001US-0327435P.
 PR 05-OCT-2001; 2001US-0327449P.
 PR 09-OCT-2001; 2001US-0327917P.
 PR 09-OCT-2001; 2001US-0328029P.
 PR 09-OCT-2001; 2001US-0328044P.
 PR 09-OCT-2001; 2001US-0328056P.
 PR 12-OCT-2001; 2001US-0328849P.
 PR 15-OCT-2001; 2001US-0329414P.
 PR 17-OCT-2001; 2001US-0330142P.
 PR 18-OCT-2001; 2001US-0330309P.
 PR 22-OCT-2001; 2001US-0341058P.
 PR 24-OCT-2001; 2001US-0339266P.
 PR 24-OCT-2001; 2001US-0343629P.
 PR 29-OCT-2001; 2001US-0349575P.
 PR 01-NOV-2001; 2001US-0346357P.
 PR 17-APR-2002; 2002US-0373260P.

19-APR-2002; 2002US-0373815P.
 PR 19-APR-2002; 2002US-0373817P.
 PR 19-APR-2002; 2002US-0373826P.
 PR 19-APR-2002; 2002US-0373884P.
 PR 22-APR-2002; 2002US-0374977P.
 PR 16-MAY-2002; 2002US-0381037P.
 PR 16-MAY-2002; 2002US-0381038P.
 PR 16-MAY-2002; 2002US-0381042P.
 PR 17-MAY-2002; 2002US-0381642P.
 PR 28-MAY-2002; 2002US-0383656P.
 PR 29-MAY-2002; 2002US-0383831P.
 PR 25-JUN-2002; 2002US-0391335P.
 PR 01-OCT-2002; 2002US-00262511.
 XX
 XX (CURA-) CURAGEN CORP.
 XX
 XX Smithson G, Millet I, Peyman JA, Kekuda R, Ju J, Li L, Guo X;
 PI Patturajan M, Spytek KA, Edinger SR, Ellerman K, Malyankar UM;
 PI Ott T, Gorman L, Zerkhusen BD, Anderson DW, Zhong M, Catterton E;
 PI Ji W, Miller CE, Rastelli L, Stone DJ, Pena CE, Shenoy SG;
 PI Shimkets RA, Rothenberg ME, Leach MD, Agee ML, Berghs C, Dipippo VA;
 PI Bisen AJ, Gangolli EA, Rieger DK, Spaderna SK;
 XX
 XX WPI; 2003-381626/36.
 XX
 XX New NOVX polypeptides and nucleic acids, useful for diagnosing,
 PT preventing or treating NOVX-associated disorders, e.g. diabetes, obesity,
 PT cancer or dyslipidemia, and in chromosome mapping, tissue typing or
 PT pharmacogenomics.
 XX
 XX Example C; Page 368; 586pp; English.
 PS
 XX
 XX The present invention describes NOVX proteins, where X can be 1 to 55
 CC (e.g. NOV1). Also described: (1) a composition comprising a polypeptide
 CC described above and a carrier; (2) a kit comprising, in one or more
 CC containers, the composition described above; (3) an isolated nucleic acid
 CC molecule which encodes a NOVX protein of the invention; (4) a vector
 CC comprising the nucleic acid molecule described above; (5) a cell
 CC comprising the above vector; (6) an antibody that immunospecifically
 CC binds to the polypeptide described above; (7) methods for determining the
 CC presence or amount of the above polypeptide or nucleic acid molecule in a
 CC sample; (8) methods for determining the presence of or predisposition to
 CC a disease associated with altered levels of expression of the above
 CC polypeptide or nucleic acid molecule in a first mammalian subject; (9) a
 CC method of identifying an agent that binds to the polypeptide described
 CC above; (10) a method for identifying a potential therapeutic agent for
 CC use in treating a pathology that is related to an aberrant expression or
 CC aberrant physiological interactions of the polypeptide; (11) a method of
 CC screening for a modulator of activity or of latency or predisposition to
 CC a pathology associated with the polypeptide; (12) a method for modulating
 CC the activity of the polypeptide described above; (13) methods of treating
 CC or preventing a pathology associated with the above polypeptide in a
 CC mammal; and (14) a method for producing the above polypeptide. NOVX
 CC sequences have antidiabetic, anorectic, antibacterial, virucide,
 CC immunomodulator, cytostatic, nootropic, neuroprotective, antiparkinsonian
 CC and antilipemic activities, and can be used in gene therapy. The
 CC polypeptide is useful in manufacturing a medicament for treating a
 CC syndrome associated with a human disease. The polypeptide or the nucleic
 CC acid molecule may be used to diagnose, treat or prevent metabolic
 CC disorders such as diabetes or obesity, infections, cachexia, cancer,
 CC neurodegenerative disorders such as Alzheimer's disease or Parkinson's
 CC disease, immune disorders, haematopoietic disorders and various
 CC dyslipidaemias. The nucleic acids can also be used as hybridisation
 CC probes, in chromosome mapping, tissue typing, preventive medicine and
 CC pharmacogenomics. The present sequence represents a probe for a human
 CC NOVX sequence, which is used in an example from the present invention.
 XX
 XX Sequence 21 BP; 6 A; 10 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 94.1%; Pred. No. 1.5e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1815 TGGGGTCTGCTCTGGG 1831
 DB 21 TGGGGTCTGCTCTGGG 5
 RESULT 1258
 AAL54133
 ID AAL54133 standard; DNA; 21 BP.
 XX AC AAL54133;
 XX DT 28-MAR-2003 (first entry)
 XX DE Hamster 6-OST-3 PCR primer target region #2.
 XX KW Anticoagulant; ahrombolytic; sulfate; 6-O position; N-acetylglucosamine;
 KW GlcNAc; sugar residue; glucosaminyl 6-O-sulfotransferase; 6-OST protein;
 KW heparan sulfate; 3-O-sulfated; 3-OST-1 protein; antithrombin; blood flow;
 KW dialysis machine; thrombotic disease; extracorporeal medical device;
 KW intracorporeal device; transplant; stent; prosthetic implant; hamster;
 KW blood clotting; PCR; primer; ss.
 XX OS Cricetulus griseus.
 XX PN WO200279258-A2.
 XX PD 10-OCT-2002.
 XX PF 28-MAR-2002; 2002WO-US010172.
 XX PR 28-MAR-2001; 2001US-0279523P.
 XX PR 30-AUG-2001; 2001US-0316289P.
 XX PA (MASI) MASSACHUSETTS INST TECHNOLOGY.
 XX PI Rosenberg RD, Zhang L, Beeler DL;
 XX WPI; 2003-129077/12.
 XX PT Transferring sulfate to 6-O position of N-acetylglucosamine sugar residue
 PT in a polysaccharide preparation, by contacting the preparation with
 PT glucosaminyl 6-O-sulfotransferase protein in presence of a sulfate donor.
 XX Example 14; Page 29; 48pp; English.
 XX The invention relates to a novel method for transferring a sulfate on to
 CC 6-O position of a N-acetylglucosamine (GlcNAc) sugar residue in a
 CC polysaccharide preparation, comprising providing a polysaccharide
 CC preparation having GlcNAc sugar residues, and contacting it with
 CC glucosaminyl 6-O-sulfotransferase (6-OST) protein in the presence of a
 CC sulfate donor under conditions which permit 6-OST protein to add a
 CC sulfate to the 6-O-position of a GlcNAc sugar residue. This method is
 CC useful for enriching the portion of anticoagulant heparan sulfate present
 CC in a polysaccharide preparation, by providing a 3-O-sulfated
 CC polysaccharide preparation from a cell that expresses 3-OST-1 protein,
 CC and contacting the preparation with 6-OST protein. Enriching the
 CC antithrombin-binding fraction of a heparan sulfate pool is useful in the
 CC production of anticoagulant heparan sulfate which have clinical
 CC applications as therapeutics, e.g. as an agent to treat or prevent
 CC thrombotic disease and to maintain blood flow in medical devices, e.g.
 CC dialysis machines. The 6-O-sulfated preparations and the heparan sulfate
 CC are useful as therapeutic agents to treat and/or prevent any conditions
 CC improved by administration an anticoagulant, e.g. thrombotic disease and
 CC to coat surfaces of extracorporeal medical devices or intracorporeal
 CC devices (e.g. transplants, stents or other prosthetic implants) to reduce
 CC blood clotting on those surfaces. The mutant CHO cell hyper-produces
 CC anticoagulant-active heparan sulfate. This polynucleotide sequence
 CC represents a PCR primer target region of the invention
 XX
 XX Sequence 21 BP; 5 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 94.1%; Pred. No. 1.5e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1541 TCACCTTCAAGGACCTG 1557
 ||||| ||||| |||||
 Db 2 TCACCTTCAAGGACCTG 18

RESULT 1259
 ACC69504/c
 ID ACC69504 standard; cDNA; 21 BP.
 XX
 AC ACC69504;
 XX
 DT 21-JUL-2003 (first entry)
 XX
 DE Human DSP-18 PCR primer SEQ ID NO:26.
 XX
 KW Human; dual-specificity phosphatase; DSP-18; enzyme; cytostatic;
 KW immunosuppressive; antiallergic; MAP-kinase modulator; dephosphorylation;
 KW signal transduction modulator; cell proliferation; cell differentiation;
 KW cell survival; proliferative response; Duchenne muscular dystrophy;
 KW cancer; graft-versus-host disease; autoimmune disease; allergy;
 KW metabolic disease; abnormal cell growth; abnormal cell proliferation;
 KW cell cycle abnormality; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2003025196-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 16-MAY-2002; 2002WO-US015906.
 XX
 PR 16-MAY-2001; 2001US-0291476P.
 XX
 PA (CEPT-) CEPTYR INC.
 XX
 PI Luche RM, Wei B;
 XX
 WIPI; 2003-371819/35.
 DR
 XX
 PT New DSP-18 dual-specificity phosphatases, useful for modulating cell
 PT proliferation, differentiation or survival, or for identifying modulators
 PT of DSP-18 activity for treating e.g. cancer or graft-versus-host disease
 PT in a patient.
 XX
 PS Example 2; Page 59; 113pp; English.

ACC69489 to ACC69495 encode the human dual-specificity phosphatases
 designated DSP-18a to DSP-19f and prototypal DSP-18pr given in ABR43450
 to ABR43456. DSP-18 proteins have the ability to dephosphorylate an
 activated mitogen activated protein (MAP)-kinase. DSP-18 sequences have
 cytostatic, immunosuppressive and antiallergic activities, and can be
 used as modulators of MAP-kinases and signal transduction. The DSP-18
 proteins can be used for identifying antibodies and other modulators
 (particularly inhibitors) of DSP-18 activity. The DSP-18 proteins may be
 used to modulate cell proliferation, cell differentiation and cell
 survival, or to treat diseases associated with cell proliferation,
 differentiation or survival. The DSP-18 proteins are especially useful
 for stimulating dephosphorylation of DSP-18 substrates. A modulator of
 DSP-18 activity can be used for modulating a proliferative response in a
 cell, differentiation of a cell or survival of a cell; or for treating a
 patient afflicted with a disorder (e.g. Duchenne muscular dystrophy,
 cancer, graft-versus-host disease, autoimmune diseases, allergies,
 metabolic diseases, abnormal cell growth, abnormal cell proliferation, or
 cell cycle abnormalities) associated with DSP-18 activity. The present
 sequence represents a PCR primer for human DSP-18, which is used in an
 example from the present invention

Sequence 21 BP; 5 A; 3 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 94.1%; Pred. No. 1.5e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1880 AGCTCTTCAAGCTGCTG 1896
 ||||| ||||| |||||
 Db 18 AACTCTTCAAGCTGCTG 2

RESULT 1260
 ADG77085
 ID ADG77085 standard; DNA; 21 BP.
 XX
 AC ADG77085;
 XX
 DT 11-MAR-2004 (first entry)
 XX
 DE V-gene primary amplification PCR primer N5.
 XX
 KW antibody expression library; antibody; vaccine; cytostatic;
 KW immunosuppressive; antiallergic; gene therapy; cancer;
 KW autoimmune disease; allergic disease; target antigen; PCR primer; V-gene;
 KW ss.
 XX
 OS Synthetic.
 XX
 PN WO2003095491-A2.
 XX
 PD 20-NOV-2003.
 XX
 PF 14-MAY-2003; 2003WO-GB002073.
 XX
 PR 14-MAY-2002; 2002GB-00011015.
 PR 29-NOV-2002; 2002GB-00027977.
 PR 06-MAR-2003; 2003US-00379996.
 XX
 PA (AFPI-) AFFITECH AS.
 PA (OWEN/) OWEN D J.
 XX
 PI Brekke OH, Stacy J, Kausmally L;
 XX
 WIPI; 2004-012090/01.
 DR
 XX
 PT New antibody expression library derived from a patient that has been
 PT immunochallenged with one or more foreign antigens, useful for treating
 PT cancer, or autoimmune and allergic disease.
 XX
 PS Example 2; Page 64; 86pp; English.

The present invention describes an antibody expression library derived
 from a patient that has been immunochallenged with one or more foreign
 antigens associated with a particular disease or foreign agent. Also
 described: (1) a method for producing the expression library derived from
 the patient as described above; (2) libraries of cloned nucleic acid
 fragments comprising the variable heavy chain regions and/or variable
 light chain regions, or their fragments, of antibody genes derived from
 the antibody-producing cells of immunochallenged patients; (3) a method
 of identifying and/or isolating from an antibody expression library one
 or more antibody molecules that is a specific binding partner for a
 target antigen; (4) a method for manufacturing a specific antibody
 molecule; (5) an antibody molecule identified, manufactured or formulated
 as above; (6) a method of treating, diagnosing or imaging a patient; (7)
 a method to develop and/or produce a recombinant vaccine; (8) a
 recombinant vaccine produced above; and (9) an expression vector
 comprising one or more dummy nucleic acid fragments located in the parts
 of the vector into which the nucleic acid inserts encoding a desired
 polypeptide will be cloned, where the dummy fragments are positioned such
 that they are not in reading frame with the other parts of the expression
 vector, which when not expressed, do not give detectable polypeptide
 products. The antibody expression library has cytostatic,
 immunosuppressive and antiallergic activities, and can be used in gene
 therapy. The library is useful for treating cancer, autoimmune disease or
 allergic disease, for differential screening with different target
 antigens to identify cross-reactive antibodies, for developing vaccines
 and identifying the immunogens of a vaccine that stimulate the most

CC effective and protective antibodies, and for detecting, isolating,
CC identifying, selecting or manufacturing one or more antibody molecules
CC that bind specifically to one or more target antigens. The expression
CC vector is useful for producing an antibody expression library. The
CC present sequence represents a PCR primer for the primary amplification of
CC V-gene, which is used in an example from the present invention for the
CC generation and screening of meningococcal B vaccine libraries.

XX
SQ Sequence 21 BP; 3 A; 3 C; 9 G; 3 T; 0 U; 3 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 21;

Best Local Similarity 76.2%; Pred.No. 1.5e+03;

Matches 16; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

OY 853 GAGGAGGAGCTGGTGAGGCT 873

||||| ||||| ||||| ||||| |||||

Db 1 GAGGTGCAGCTGKTGGAGWCY 21

RESULT 1261

ADJ97759/c

ID ADJ97759 standard; DNA; 21 BP.

XX

AC ADJ97759;

XX

DT 06-MAY-2004 (first entry)

XX

DE Human Flk-1/KDR DNA sequence, a target for siRNA inhibition SeqID 532.

XX

KW human; ss; short interfering RNA; siRNA; angiogenesis;

KW vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1;

KW Flk-1/KDR; kinase domain region; diabetic retinopathy;

KW age-related macular degeneration; inflammatory disease; psoriasis;

KW rheumatoid arthritis; cancer; breast; retinoblastoma; Wilms' tumour;

KW lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;

KW antipsoriatic; antirheumatic; antiarthritic.

XX

OS Homo sapiens.

XX

PN WO2004009769-A2.

XX

PD 29-JAN-2004.

XX

PF 18-JUL-2003; 2003WO-US022444.

XX

PR 24-JUL-2002; 2002US-0398417P.

XX

PR 14-NOV-2002; 2002US-00294228.

XX

PA (UYPE-) UNIV PENNSYLVANIA.

XX

PI Tolentino MJ, Reich SJ;

XX

DR WPI; 2004-203472/19.

XX

PT Novel short interfering RNA (siRNA) comprises sense and antisense RNA

PT strands, useful for inhibiting expression of human vascular endothelial

PT growth factor mRNA, for treating angiogenic disease, e.g. diabetic

PT retinopathy and cancer.

XX

PS Disclosure; SEQ ID NO 532; 218pp; English.

XX

CC This invention relates to novel compositions that comprise short

CC interfering RNA (siRNA) molecules, which can be used to inhibit

CC angiogenesis. Specifically, it refers to siRNAs that target and cause

CC RNAI-induced degradation of mRNA from human vascular endothelial growth

CC factor (VEGF), the VEGF receptor (Flt-1) and the Flk-1/KDR (kinase domain

CC region) genes, as well as mutants derived thereof. The present invention

CC describes sense and antisense RNA strands that form an RNA duplex and

CC bind to the target mRNA, such that expression is inhibited and the target

CC degraded. As such, siRNA administered in combination with a therapeutic

CC agent is useful for treating diseases associated with angiogenesis and

CC the overexpression of VEGF, which include diabetic retinopathy, age-

CC related macular degeneration, inflammatory disease, psoriasis and

CC rheumatoid arthritis. Furthermore, it can be used to treat various
CC cancers including breast, retinoblastoma, Wilms' tumour and lymphoma.
CC Accordingly, these compositions exhibit cytostatic, antidiabetic,
CC ophthalmological, antiinflammatory, antipsoriatic, antirheumatic and
CC antiarthritic activities. This oligonucleotide is a human Flk-1/KDR DNA
CC oligo, a target for siRNA inhibition of the invention.

XX Sequence 21 BP; 10 A; 2 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 21;

Best Local Similarity 94.1%; Pred.No. 1.5e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2997 CACCGAGTTTGTGTTT 3013

||||| ||||| ||||| |||||

Db 18 CACCACAGTTTGTGTTT 2

RESULT 1262

ADJ97760/c

ID ADJ97760 standard; DNA; 21 BP.

XX

AC ADJ97760;

XX

DT 06-MAY-2004 (first entry)

XX

DE Human Flk-1/KDR DNA sequence, a target for siRNA inhibition SeqID 533.

XX

KW human; ss; short interfering RNA; siRNA; angiogenesis;

KW vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1;

KW Flk-1/KDR; kinase domain region; diabetic retinopathy;

KW age-related macular degeneration; inflammatory disease; psoriasis;

KW rheumatoid arthritis; cancer; breast; retinoblastoma; Wilms' tumour;

KW lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;

KW antipsoriatic; antirheumatic; antiarthritic.

XX

OS Homo sapiens.

XX

PN WO2004009769-A2.

XX

PD 29-JAN-2004.

XX

PF 18-JUL-2003; 2003WO-US022444.

XX

PR 24-JUL-2002; 2002US-0398417P.

XX

PR 14-NOV-2002; 2002US-00294228.

XX

PA (UYPE-) UNIV PENNSYLVANIA.

XX

PI Tolentino MJ, Reich SJ;

XX

DR WPI; 2004-203472/19.

XX

PT Novel short interfering RNA (siRNA) comprises sense and antisense RNA

PT strands, useful for inhibiting expression of human vascular endothelial

PT growth factor mRNA, for treating angiogenic disease, e.g. diabetic

PT retinopathy and cancer.

XX

PS Disclosure; SEQ ID NO 533; 218pp; English.

XX

CC This invention relates to novel compositions that comprise short

CC interfering RNA (siRNA) molecules, which can be used to inhibit

CC angiogenesis. Specifically, it refers to siRNAs that target and cause

CC RNAI-induced degradation of mRNA from human vascular endothelial growth

CC factor (VEGF), the VEGF receptor (Flt-1) and the Flk-1/KDR (kinase domain

CC region) genes, as well as mutants derived thereof. The present invention

CC describes sense and antisense RNA strands that form an RNA duplex and

CC bind to the target mRNA, such that expression is inhibited and the target

CC degraded. As such, siRNA administered in combination with a therapeutic

CC agent is useful for treating diseases associated with angiogenesis and

CC the overexpression of VEGF, which include diabetic retinopathy, age-

CC related macular degeneration, inflammatory disease, psoriasis and

CC rheumatoid arthritis. Furthermore, it can be used to treat various

CC cancers including breast, retinoblastoma, Wilms' tumour and lymphoma.
 CC Accordingly, these compositions exhibit cytostatic, antidiabetic,
 CC ophthalmological, antiinflammatory, antipsoriatic, antirheumatic and
 CC antiarthritic activities. This oligonucleotide is a human Flk-1/KDR DNA
 CC oligo, a target for siRNA inhibition of the invention.
 XX
 SQ Sequence 21 BP; 9 A; 3 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 94.1%; Pred. No. 1.5e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2997 CACCGCAGTTTGTGTTT 3013
 |||||
 Db 17 CACCACAGTTTGTGTTT 1

RESULT 1263
 ADJ97758/c
 ID ADJ97758 standard; DNA; 21 BP.
 XX
 AC ADJ97758;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Human Flk-1/KDR DNA sequence, a target for siRNA inhibition SeqID 531.
 XX
 DE human; ss; short interfering RNA; siRNA; angiogenesis;
 KW vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1;
 KW Flk-1/KDR; kinase domain region; diabetic retinopathy;
 KW age-related macular degeneration; inflammatory disease; psoriasis;
 KW rheumatoid arthritis; cancer; breast; retinoblastoma; Wilms' tumour;
 KW lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;
 KW antipsoriatic; antirheumatic; antiarthritic.

OS Homo sapiens.
 XX
 XX WO2004009769-A2.
 XX
 XX 29-JAN-2004.
 XX
 XX 18-JUL-2003; 2003WO-US022444.
 XX
 XX 24-JUL-2002; 2002US-0398417P.
 XX
 XX 14-NOV-2002; 2002US-00294228.
 XX
 XX (UYPE-) UNIV PENNSYLVANIA.
 XX
 XX Tolentino MJ, Reich SJ;
 XX
 XX WPI; 2004-203472/19.
 XX
 XX Novel short interfering RNA (siRNA) comprises sense and antisense RNA
 XX strands, useful for inhibiting expression of human vascular endothelial
 XX growth factor mRNA, for treating angiogenic disease, e.g. diabetic
 XX retinopathy and cancer.
 XX
 XX Disclosure; SEQ ID NO 531; 218bp; English.

XX This invention relates to novel compositions that comprise short
 XX interfering RNA (siRNA) molecules, which can be used to inhibit
 XX angiogenesis. Specifically, it refers to siRNAs that target and cause
 XX RNAi-induced degradation of mRNA from human vascular endothelial growth
 XX factor (VEGF), the VEGF receptor (Flt-1) and the Flk-1/KDR (kinase domain
 XX region) genes, as well as mutants derived thereof. The present invention
 XX describes sense and antisense RNA strands that form an RNA duplex and
 XX bind to the target mRNA, such that expression is inhibited and the target
 XX degraded. As such, siRNA administered in combination with a therapeutic
 XX agent is useful for treating diseases associated with angiogenesis and
 XX the overexpression of VEGF, which include diabetic retinopathy, age-
 XX related macular degeneration, inflammatory disease, psoriasis and
 XX rheumatoid arthritis. Furthermore, it can be used to treat various
 XX cancers including breast, retinoblastoma, Wilms' tumour and lymphoma.

CC Accordingly, these compositions exhibit cytostatic, antidiabetic,
 CC ophthalmological, antiinflammatory, antipsoriatic, antirheumatic and
 CC antiarthritic activities. This oligonucleotide is a human Flk-1/KDR DNA
 CC oligo, a target for siRNA inhibition of the invention.
 XX
 SQ Sequence 21 BP; 11 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 94.1%; Pred. No. 1.5e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2997 CACCGCAGTTTGTGTTT 3013
 |||||
 Db 21 CACCACAGTTTGTGTTT 5

RESULT 1264
 ADN63068/c
 ID ADN63068 standard; DNA; 21 BP.
 XX
 AC ADN63068;
 XX
 DT 01-JUL-2004 (first entry)
 XX
 DE Human NOVX probe #6.
 XX
 DE ss; human; NOVX; metabolic disorder; diabetes; obesity;
 KW infectious disease; anorexia; cancer; cancer-associated cachexia;
 KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
 KW immune disorder; haematopoietic disorder; dyslipidaemia;
 KW metabolic syndrome X; wasting disorder; probe.

OS Homo sapiens.
 XX
 XX US2004038223-A1.
 XX
 XX 26-FEB-2004.
 XX
 XX 01-OCT-2002; 2002US-00262511.
 XX
 XX 02-OCT-2001; 2001US-0326483P.
 XX
 XX 05-OCT-2001; 2001US-0327435P.
 XX
 XX 09-OCT-2001; 2001US-0327449P.
 XX
 XX 09-OCT-2001; 2001US-0327917P.
 XX
 XX 09-OCT-2001; 2001US-0328029P.
 XX
 XX 09-OCT-2001; 2001US-0328044P.
 XX
 XX 09-OCT-2001; 2001US-0328056P.
 XX
 XX 12-OCT-2001; 2001US-0328849P.
 XX
 XX 15-OCT-2001; 2001US-0329414P.
 XX
 XX 17-OCT-2001; 2001US-0330142P.
 XX
 XX 18-OCT-2001; 2001US-0330309P.
 XX
 XX 22-OCT-2001; 2001US-0341058P.
 XX
 XX 24-OCT-2001; 2001US-0339268P.
 XX
 XX 24-OCT-2001; 2001US-0343629P.
 XX
 XX 29-OCT-2001; 2001US-0349575P.
 XX
 XX 01-NOV-2001; 2001US-0346357P.
 XX
 XX 17-APR-2002; 2002US-0373260P.
 XX
 XX 19-APR-2002; 2002US-0373815P.
 XX
 XX 19-APR-2002; 2002US-0373817P.
 XX
 XX 19-APR-2002; 2002US-0373826P.
 XX
 XX 19-APR-2002; 2002US-0373884P.
 XX
 XX 22-APR-2002; 2002US-0374977P.
 XX
 XX 16-MAY-2002; 2002US-0381037P.
 XX
 XX 16-MAY-2002; 2002US-0381038P.
 XX
 XX 16-MAY-2002; 2002US-0381042P.
 XX
 XX 16-MAY-2002; 2002US-0381642P.
 XX
 XX 28-MAY-2002; 2002US-0383656P.
 XX
 XX 29-MAY-2002; 2002US-0383831P.
 XX
 XX 25-JUN-2002; 2002US-0391335P.
 XX
 XX (SMIT/) SMITHSON G.
 XX
 XX (MILL/) MILLET I.
 XX
 XX (PEYM/) PEYMAN J A.

PA (KEKU/) KEKUDA R.
PA (JUGU/) JU J.
PA (LILL/) LI L.
PA (GUOX/) GUO X.
PA (PATT/) PATTURAJAN M.
PA (SPYT/) SPYTEK K A.
PA (EDIN/) EDINGER S R.
PA (ELLE/) ELLERMAN K.
PA (MALY/) MALYANKAR U M.
PA (ORTT/) ORT T.
PA (GORM/) GORMAN L.
PA (ZERH/) ZERHUSEN B D.
PA (ANDE/) ANDERSON D W.
PA (ZHON/) ZHONG M.
PA (CATT/) CATTERTON E.
PA (JIWW/) JI W.
PA (MILL/) MILLER C E.
PA (RASI/) RASTELLI L.
PA (STON/) STONE D J.
PA (PENA/) PENA C E A.
PA (SHIM/) SHIMKETS R A.
PA (ROTH/) ROTHENBERG M E.
PA (LEAC/) LEACH M D.
PA (AGEE/) AGEE M L.
PA (BERG/) BERGHS C.
PA (DIPI/) DIPIPPO V A.
PA (EISE/) EISEN A.
PA (GANG/) GANGOLLI E A.
PA (RIEG/) RIEGER D K.
PA (SPAD/) SPADERNA S K.
XX
PI Smithson G, Millet I, Peyman JA, Kekuda R, Ju J, Li L, Guo X;
PI Patturajan M, Spytek KA, Edinger SR, Ellerman K, Malyankar UM;
PI Ort T, Gorman L, Zerhuseen BD, Anderson DW, Zhong M, Catterton E;
PI Ji W, Miller CE, Rastelli L, Stone DJ, Pena CE, Sheno S;
PI Shimkets RA, Rothenberg ME, Leach MD, Agee ML, Berghs C, Dipippo VA;
PI Eisen A, Gangolli EA, Rieger DK, Spaderna SK;
XX
DR WPI; 2004-213931/20.
XX
PT Isolated NOVX polypeptides and nucleic acids, useful for preventing,
PT diagnosing and treating e.g. cancer, diabetes and Alzheimer's disease.
XX
PS Example 54; SEQ ID NO 265; 395pp; English.
XX
CC The invention relates to isolated NOVX polypeptides and polynucleotides.
CC NOVX polypeptides and polynucleotides are used to prevent, diagnose or
CC treat a medical condition in human related to the aberrant expression and
CC activity of NOVX polypeptides. For example, NOVX polypeptides and
CC polynucleotides may be used to treat disorders associated with decreased
CC expression or activity of NOVX by supplementing the patient our
CC production or to rectify mutations. Conversely, antisense NA molecules
CC may be administered to down regulate expression of NOVX polypeptides by
CC binding with the cells own genes and preventing their expression. NOVX
CC polynucleotides and complementary sequences may also be used as DNA
CC probes in diagnostic assays to detect and quantitate the presence of
CC similar sequences in samples, and so which patients may be in need of
CC restorative therapy. NOVX polypeptides may also be used as antigens in
CC the production of antibodies and in assays to identify modulators
CC (agonists and antagonists) of the expression and activity of NOVX. The
CC anti-NOVX polypeptide antibodies, agonists and antagonists may also be
CC used to modulate NOVX polynucleotide expression and activity of NOVX
CC polypeptides. The anti-NOVX polypeptide antibodies may also be used as
CC diagnostic agents for detecting the presence of NOVX in samples. NOVX
CC polypeptides and polynucleotides may be used in this way to prevent,
CC diagnose and treat: metabolic disorders, diabetes, obesity, infectious
CC disease, anorexia, cancer, cancer-associated cachexia, neurodegenerative
CC disorders, Alzheimer's Disease, Parkinson's Disorder, immune disorders,
CC haematopoietic disorders, and the various dyslipidaemias, metabolic
CC disturbances associated with obesity, the metabolic syndrome X and
CC wasting disorders associated with chronic diseases and various cancers.
CC They may also be used as antibacterial agents. The present sequence

CC represents a human NOVX probe.
XX
SQ Sequence 21 BP; 6 A; 10 C; 4 G; 1 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 1.5e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1815 TGGGGTCTCTCTGGG 1831
Db 21 TGGGGTCTCTCTGGG 5
RESULT 1365
ADO80395/c
ID ADO80395 standard; DNA; 21 BP.
XX
AC ADO80395;
XX
DT 29-JUL-2004 (first entry)
XX
DE Mouse phospholipase C gamma 2 gene amplification primer plcg2-48.
XX
KW ss; primer; anti-inflammatory; dermatological; osteopathic;
KW ophthalmological; antiulcer; murine; human;
KW phospholipase C gamma-2 protein; diagnosis; Wegener's granulomatosis;
KW Churg-Strauss syndrome; Polyarteritis nodosa.
XX
OS Mus musculus.
XX
FN WO2004020619-A1.
XX
PD 11-MAR-2004.
XX
PF 01-SEP-2003; 2003WO-EP009690.
XX
PR 30-AUG-2002; 2002US-0407517P.
XX
PA (INGE-) INGENIUM PHARM AG.
XX
PI Constien R, Mudde G, Schroeder A, Yu P, Hanke P;
XX
DR WPI; 2004-449493/42.
XX
PT Mutant murine or human Phospholipase C (PLC) gamma-2 proteins, useful for
PT preventing, diagnosing and treating inflammatory diseases, e.g. Wegener's
PT granulomatosis, Churg-Strauss syndrome or Polyarteritis nodosa.
XX
PS Example 4; SEQ ID NO 64; 229pp; English.
XX
CC The invention relates to an isolated, mutant murine or human
CC Phospholipase C (PLC) gamma-2 protein. The mutant PLCgamma-2 proteins and
CC nucleic acids that encode them may be used in the prevention, diagnosis
CC and treatment of diseases associated with inappropriate PLCgamma-2
CC expression. For example, the peptides and nucleic acids may be used to
CC treat disorders associated with decreased expression by rectifying
CC mutations or deletions in a patient's genome that affect the activity of
CC PLCgamma-2 by expressing inactive proteins or to supplement the patients
CC own production of PLCgamma-2. Conversely inhibitory nucleic acids may be
CC administered to down regulate PLCgamma-2 expression. The PLCgamma-2
CC proteins and nucleic acids may also be used in assays to identify
CC modulators of PLCgamma-2 expression and activity. The antibodies and
CC antagonists may also be used to down regulate expression and activity.
CC Disorders that may be prevented, diagnosed and/or treated by the above
CC methods include, e.g. Wegener's granulomatosis, Churg-Strauss syndrome or
CC Polyarteritis nodosa. This sequence corresponds to a PCR primer to
CC amplify the mouse phospholipase C gamma 2 gene.
XX
SQ Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 1.5e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1559 TGTCTGTGCTACCAG 1575
 DB 18 TGTCTGTGCTACCAG 2
 RESULT 1266
 ADI20640
 ID ADI20640 standard; DNA; 22 BP.
 AC ADI20640;
 XX
 XX
 XX 22-APR-2004 (first entry)
 XX
 XX Primer of the invention #1.
 XX immunoglobulin molecule; heavy chain framework region; HFR1; HFR2; HFR3;
 KW HFR4; tumour imaging; protein chips assay; light chain framework region;
 KW LFR; primer; ss.
 XX
 XX Synthetic.
 XX
 XX WO2003025124-A2.
 XX
 XX 27-MAR-2003.
 XX
 XX 13-SEP-2002; 2002WO-US029003.
 XX
 XX 14-SEP-2001; 2001US-0318904P.
 XX
 XX (FRAU-) FRAUNHOFER INST MOLEKULARBIOLOGIE & ANGE.
 XX
 XX Zhang MY, Schillberg S, Zimmermann S, Di Fiore S, Emans N;
 PI Fischer R;
 XX
 XX WPI; 2003-371805/35.
 XX
 XX New immunoglobulin molecule, useful in therapeutic or diagnostic assays
 PT comprising ELISA, phage display, tumor imaging or protein chips assay or
 PT in screening assays for detecting molecules that bind to the
 PT immunoglobulin molecule.
 XX
 XX Claim 23; SEQ ID NO 9; 198pp; English.
 XX
 XX The present invention relates to an immunoglobulin molecule comprising of
 CC one or more heavy chain framework regions comprising HFR1, HFR2, HFR3 or
 CC HFR4 and one or more light chain framework regions comprising LFR1, LFR2,
 CC LFR3 or LFR4; and complementarity determining regions (CDRs) comprising
 CC CDR-H1, CDR-H2, CDR-H3 and/or CDR-L1, CDR-L2 or CDR-L3. The immunoglobulin
 CC is useful in therapeutic or diagnostic assays comprising ELISA, phage
 CC display, tumour imaging or protein chips assay. Further, the
 CC immunoglobulin is useful in screening assays for detecting molecules that
 CC bind to the immunoglobulin molecule. The present sequence represents a
 CC primer of the invention.
 XX
 XX Sequence 22 BP; 4 A; 6 C; 9 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.4; DB 1; Length 22;
 Best Local Similarity 94.1%; Pred. No. 1.6e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2007 GGTGGAGGACCTGGACC 2023
 DB 4 GGTGGAGGACCTGGACC 20
 RESULT 1267
 AAC95686
 ID AAC95686 standard; DNA; 25 BP.
 XX
 XX AAC95686;
 AC
 XX 26-FEB-2001 (first entry)
 DT

XX HLA DPB1 gene PCR primer #21.
 DE
 XX DNA sequence analysis; sequencing; protein sequence; protein structure;
 KW gene typing; organ donation; bacteria identification; 16S rRNA; HLA;
 KW human leukocyte antigen; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2000065088-A2.
 XX
 XX 02-NOV-2000.
 PD
 XX 20-APR-2000; 2000WO-EP003636.
 PF
 XX 26-APR-1999; 99EP-00303215.
 PR
 XX (AMSH) AMERSHAM PHARMACIA BIOTECH AB.
 PA
 XX Ulfendahl P, Wong K;
 PI
 XX WPI; 2000-679677/66.
 DR
 XX Identifying extendible primers for use in identification, or
 PT classification of a nucleic acid of an organism, allele or gene such as
 PT class 1/2 HLA comprises identifying all possible nucleotide sequences of
 PT specific length.
 PT
 XX Claim 14; Page 38; 66pp; English.
 PS
 XX The present invention provides a method for identifying a set of
 CC extendible primers which can be used in the identification, typing and
 CC classification of genes. This can then be used to predict protein
 CC sequence and structure, in organ donation to match the organ with the
 CC receiver, and to identify bacteria in a sample. The method can be used to
 CC type the human leukocyte antigen genes (HLA) and 16S rRNA genes in
 CC particular
 XX
 XX Sequence 25 BP; 2 A; 4 C; 1 G; 18 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.4; DB 1; Length 25;
 Best Local Similarity 76.0%; Pred. No. 1.8e+03;
 Matches 19; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
 QY 3264 TTTTATTGCTTGTGCTTTTTCAG 3288
 DB 1 TTTTATTTTATTTTACCTTTTCCAG 25
 RESULT 1268
 AAC96367
 ID AAC96367 standard; DNA; 25 BP.
 XX
 XX AAC96367;
 AC
 XX
 XX 26-FEB-2001 (first entry)
 DT
 XX HLA DPB1 gene PCR primer #99.
 DE
 XX DNA sequence analysis; sequencing; protein sequence; protein structure;
 KW gene typing; organ donation; bacteria identification; 16S rRNA; HLA;
 KW human leukocyte antigen; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2000065088-A2.
 XX
 XX 02-NOV-2000.
 PD
 XX 20-APR-2000; 2000WO-EP003636.
 PF
 XX 26-APR-1999; 99EP-00303215.
 PR
 XX

```
PA (AMSH ) AMERSHAM PHARMACIA BIOTECH AB.
XX
PI Ulfendahl P, Wong K;
XX
DR WPI; 2000-679677/66.
XX
XX Identifying extendible primers for use in identification, or
PT classification of a nucleic acid of an organism, allele or gene such as
PT class 1/2 HLA comprises identifying all possible nucleotide sequences of
PT specific length.
XX
XX Claim 14; Page 50; 66pp; English.
XX
CC The present invention provides a method for identifying a set of
CC extendible primers which can be used in the identification, typing and
CC classification of genes. This can then be used to predict protein
CC sequence and structure, in organ donation to match the organ with the
CC receiver, and to identify bacteria in a sample. The method can be used to
CC type the human leukocyte antigen genes (HLA) and 16S rRNA genes in
CC particular
XX
SQ Sequence 25 BP; 2 A; 4 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 25;
Best Local Similarity 76.0%; Pred. No. 1.8e+03;
Matches 19; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
QY 3264 TTTTATTGCTTGCTGCTTTTCAG 3288
DB 1 TTTTATTTTATTTTACCTTTTCAG 25
RESULT 1269
ABL35105/c
ID ABL35105 standard; DNA; 30 BP.
XX
AC ABL35105;
XX
XX 04-APR-2002 (first entry)
XX
DE RNA/DNA hybrid assay control oligonucleotide SEQ ID NO: 11.
XX
KW DNA/RNA hybrid; phosphorothioate backbone; immunostimulatory; vaccine;
KW infection; allergy; cancer; hypersensitivity; bio-warfare;
KW immunostimulant; antiallergic; cytostatic; antimicrobial; anti-HIV;
KW immunosuppressive; protozoicide; virucide; hepatotropic; gene therapy;
KW antiinflammatory; antibacterial; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..30
FT /tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
XX
XX WO200193902-A2.
XX
XX 13-DEC-2001.
XX
XX 07-JUN-2001; 2001WO-US018276.
XX
XX 07-JUN-2000; 2000US-0209797P.
XX
XX (BIOS-) BIOSNEXUS INC.
XX
XX Mond JJ, Flora M, Kliman DM;
XX
XX WPI; 2002-130570/17.
XX
XX New immunostimulatory compositions comprising RNA/DNA hybrid
PT oligonucleotides, useful for enhancing an immune response or inducing
PT cytokines, particularly for treating diseases, e.g. cancer, allergy or
PT
```

```
PT HIV infection.
XX
PS Example 1; Page 30; 68pp; English.
XX
CC The present invention relates to an immunostimulatory composition, which
CC comprises at least one oligonucleotide comprising both an RNA region and
CC a DNA region. The composition is useful for enhancing an immune response
CC or inducing cytokines. It can be used as a vaccine adjuvant and in
CC treating diseases, including pathogenic infection, (non-)malignant
CC tumours (e.g. cancers of the brain, lung, ovary, breast, prostate or
CC colon, or carcinomas and sarcomas), autoimmune diseases or allergies
CC (e.g. allergic rhinitis, hay fever or food allergies), Lyme disease,
CC hepatitis, HIV or malaria. The composition is also useful for treating,
CC preventing or ameliorating the symptoms resulting from exposure to a bio-
CC warfare agent, e.g. Ebola, Anthrax or Listeria. The present sequence is
CC an immunostimulatory oligonucleotide described in the exemplification of
CC the invention
XX
SQ Sequence 30 BP; 26 A; 1 C; 1 G; 2 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 30;
Best Local Similarity 76.0%; Pred. No. 2.1e+03;
Matches 19; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
QY 3310 TTTTCTTTAGGAGATTATTTT 3334
DB 29 TTTTATTTTAAAGCTTTT 5
RESULT 1270
AAAX14633
ID AAX14633 standard; DNA; 35 BP.
XX
AC AAX14633;
XX
XX 24-MAR-1999 (first entry)
XX
DE Triple helix third strand of n-myc gene nucleotides 4791-4725.
XX
KW Triplex formation; DNA detection; triple helix; identification; bacteria;
KW oncogene; virus; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US5861244-A.
XX
PD 19-JAN-1999.
XX
XX 22-DEC-1993; 93US-00173489.
XX
XX 29-OCT-1992; 92US-00968436.
XX
XX (PROP-) PROFILE DIAGNOSTIC SCI INC.
XX
XX Hepburn AG, Wang C;
XX
XX WPI; 1999-130384/11.
XX
XX Assay of genetic sequences based on triplex formation from double
PT stranded analyte - and hybrid of anchor and reporter sequences, with
PT reporter released if triplex formation occurs, used e.g. to identify
PT bacteria.
XX
PS Disclosure; Col 13-14; 168pp; English.
XX
XX The present sequence represents a polynucleotide that is able to form a
XX triple helix with a double stranded sequence. Cytosine bases in the
XX present can be replaced with 5-methylcytosine for increased triplex
XX stability. The present sequence is used in the assay of the invention,
XX where it can be part of the anchor DNA or reporter DNA sequence. The
XX assay comprises adding a sample containing double-stranded DNA test
XX sequences to an aqueous medium containing at least one complex of anchor
```

CC DNA, attached to a solid support, and reporter DNA, where either a part
CC of the anchor DNA or reporter DNA is designed to form a triple-strand
CC structure with part of the test sequence. Triplex formation results in
CC displacement of the reporter DNA which is detected as an indication of
CC the presence of the DNA test sequence. The method is used to detect DNA
CC sequences, particularly for identification of bacteria (by detecting
CC genes for ribosomal RNA) in clinical samples, but also detection of
CC oncogenes and Hepatitis B virus
XX
SQ Sequence 35 BP; 0 A; 4 C; 1 G; 30 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 35;
Best Local Similarity 76.0%; Pred. No. 2.3e+03;
Matches 19; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 3262 TATTTTATTTGCTTTCCTTTTC 3286
DB 2 TTTTTCCTTTTTCCTTTTC 26

RESULT 1271
AAD27122/c
ID AAD27122 standard; RNA; 36 BP.

XX AAD27122;
AC
XX
XX
DT 09-APR-2002 (first entry)
DE RNA template, C(UA)3G used to direct RNA synthesis by HCV RNA polymerase.
XX
XX Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;
KW lead compound; RNA polymerase; ss.
XX
XX Unidentified.

XX US6322966-B1.
PN
PD 27-NOV-2001.
XX
XX 11-MAY-1999; 99US-00309670.
PF
XX 11-MAY-1999; 99US-00309670.
PR

XX (ZHON/) ZHONG W.
PA (HONG/) HONG Z.
PA (LAU/) LAU J Y N.

XX Zhong W, Hong Z, Lau JYN;
PI
XX WPI; 2002-096587/13.

XX Assay system for hepatitis C virus replicase activity comprises RNA
PT template with unstable, small stemloop capable of forming copy-back
PT structure, viral non-structural protein 5B, nucleoside triphosphates,
PT buffer.

XX Example 1; Fig 1C; 10pp; English.

XX The present invention relates to an assay system for hepatitis C virus
CC (HCV) replicase activity. The assay system comprises an RNA template that
CC has an unstable, small stemloop at the 3' end capable of forming a copy-
CC back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP,
CC and UTP nucleoside triphosphates (NTPs), where one of the NTP is
CC radiolabelled and an assay buffer that supports replication activity of
CC NS5B. The invention also relates to the identification of optimal
CC properties of an RNA template for copy-back self-priming RNA synthesis of
CC HCV. This activity can be used to screen for anti-HCV replicase compounds
CC or to characterise the biological relevance of lead compounds. The
CC optimal RNA templates can be used for developing a system to characterise
CC HCV NS5B polymerase mechanistically and kinetically and for designing
CC small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay
CC system of the invention is useful for detecting HCV replicase activity.
CC The nucleic acid synthesised by NS5B is detected by evaluating an

CC autoradiograph of reaction products separated by gel electrophoresis. The
CC present sequence is RNA template, C(UA)3G used to direct RNA synthesis by
CC RNA polymerase proteins of HCV, BVDV and poliovirus. This sequence is used
CC in the exemplification of the invention

SQ Sequence 36 BP; 29 A; 1 C; 3 G; 0 T; 3 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 36;
Best Local Similarity 66.7%; Pred. No. 2.4e+03;
Matches 22; Conservative 0; Mismatches 11; Indels 0; Gaps 0;

QY 3302 CTATAGGATTTTCTTTAGGAGATTTATTTT 3334
DB 36 CTATAGATTTTCTTTTCTTTTCTTTTCTTTT 4

RESULT 1272
AAD27123/c
ID AAD27123 standard; RNA; 36 BP.

XX AAD27123;
AC
XX
XX
DT 09-APR-2002 (first entry)
DE RNA template CC(AU)2GG for directing RNA synthesis by HCV RNA polymerase.
XX
XX Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;
KW lead compound; RNA polymerase; ss.
XX
XX Unidentified.

XX US6322966-B1.
PN
PD 27-NOV-2001.
XX
XX 11-MAY-1999; 99US-00309670.
PF
XX 11-MAY-1999; 99US-00309670.
PR

XX (ZHON/) ZHONG W.
PA (HONG/) HONG Z.
PA (LAU/) LAU J Y N.

XX Zhong W, Hong Z, Lau JYN;
PI
XX WPI; 2002-096587/13.

XX Assay system for hepatitis C virus replicase activity comprises RNA
PT template with unstable, small stemloop capable of forming copy-back
PT structure, viral non-structural protein 5B, nucleoside triphosphates,
PT buffer.

XX Example 1; Fig 1C; 10pp; English.

XX The present invention relates to an assay system for hepatitis C virus
CC (HCV) replicase activity. The assay system comprises an RNA template that
CC has an unstable, small stemloop at the 3' end capable of forming a copy-
CC back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP,
CC and UTP nucleoside triphosphates (NTPs), where one of the NTP is
CC radiolabelled and an assay buffer that supports replication activity of
CC NS5B. The invention also relates to the identification of optimal
CC properties of an RNA template for copy-back self-priming RNA synthesis of
CC HCV. This activity can be used to screen for anti-HCV replicase compounds
CC or to characterise the biological relevance of lead compounds. The
CC optimal RNA templates can be used for developing a system to characterise
CC HCV NS5B polymerase mechanistically and kinetically and for designing
CC small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay
CC system of the invention is useful for detecting HCV replicase activity.
CC The nucleic acid synthesised by NS5B is detected by evaluating an
CC autoradiograph of reaction products separated by gel electrophoresis. The
CC present sequence is RNA template, CC(AU)2GG used to direct RNA synthesis
CC by RNA polymerase proteins of HCV, BVDV and poliovirus. This sequence is
CC used in the exemplification of the invention

RESULT 1275

```

AAT65783
ID AAT65783 standard; DNA; 41 BP.
XX AC
XX AAT65783;
XX
XX 25-MAR-2003 (revised)
DT 17-JUN-1997 (first entry)
XX
XX Repeat sequence from polymorphic marker clone Mfd112.
DE XX
DE XX
DE XX
XX Polymorphism; repeat sequence; genetic marker; primer; amplification;
KW PCR; polymerase chain reaction; paternity; maternity; human; pedigree;
KW linkage analysis; genetic disease; animal; plant; breeding; locus;
KW hybridisation; chromosome; ds.
XX
XX Homo sapiens.
OS
XX
XX US5582979-A.
PN
XX
XX 10-DEC-1996.
PD
XX
XX 04-APR-1994; 94US-00222177.
PF
XX
XX 21-APR-1989; 89US-00341562.
PR
XX 05-SEP-1991; 91US-00754351.
XX
XX (MARS-) MARSHFIELD CLINIC.
PA
XX
XX Weber JL;
PI
XX
XX WPI; 1997-042299/04.
DR
XX
XX Detection of polymorphic genetic markers of the form (dC-dA)n(dG-dT)n -
PT using novel nucleic acid mols. as primers.
XX
XX Claim 1; Col 13-14; 186pp; English.
PS
XX
XX The invention relates to the isolation of polymorphic repeat sequences
CC having the sequence (dC-dA)n.(dG-dT)n which can be used as genetic
CC markers. Primers based on these sequences can be used to detect these
CC repeats, especially for use in e.g. paternity or maternity testing, human
CC genetic analysis such as linkage analysis of genetic disease, commercial
CC animal or plant breeding or pedigree analysis. Clones containing the
CC repeat sequences were isolated by hybridisation of chromosome-specific
CC phage libraries with a synthetic poly(dC-dA).(dG-dT) probe. Over 100
CC repeat blocks were isolated. The inserts from the clones were amplified
CC by primers AAT65798-766047. Those clones where the repeat sequence has
CC been determined are shown in AAT65704-797. This repeat sequence is from
CC the marker clone Mfd112 which contains the repeat sequence having the
CC formula: CCACCCCGAG(CA)24.5. (Updated on 25-MAR-2003 to correct PF
CC field.)
XX
XX Sequence 41 BP; 18 A; 18 C; 3 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.4; DB 1; Length 41;
Best Local Similarity 61.0%; Pred. No. 2.5e+03;
Matches 25; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

QY 3047 TGGGCCCTGGGACTCTTGTCCACACACACACACACACTTCCA 3087
DB 1 TGAGACCTTGACACACACACACACACACACACACACACACA 41

RESULT 1276
AAT27914
ID AAT27914 standard; DNA; 18 BP.
XX AC
XX AAT27914;
XX
XX 28-JAN-1997 (first entry)
DT
XX
XX 5'-anchored simple sequence repeat primer HVH(TG)7.5.
DE
XX
XX Detection; polymorphism; perfect compound simple sequence repeat;
KW adaptor directed primer; genome; genetic; fingerprinting;
KW amplified fragment length polymorphism assay; microsatellite region;
KW genetic trait marking; germplasm comparisons; 5'-anchored; ss.
XX
XX Synthetic.
OS
XX
XX WO9617082-A2.
PN
XX
XX 06-JUN-1996.
PD
XX
XX 21-NOV-1995; 95WO-US015150.
PF
XX
XX 28-NOV-1994; 94US-00346456.
PR
XX
XX (DUPO ) DU PONT DE NEMOURS & CO E I.
PA
XX
XX Morgante M, Vogel JM;
PI
XX
XX WPI; 1996-277795/28.
DR
XX
XX Modified amplified fragment length polymorphism assay - for detection of
PT polymorphism esp. in microsatellite regions.
XX
XX Example 1; Page 77; 173pp; English.
PS
XX
XX Detecting polymorphisms between 2 nucleic acid samples, esp. in
CC microsatellite regions, comprises digesting the nucleic acid to generate
CC fragments, ligating adaptor segments to their ends, amplifying them using
CC primer directed amplification and comparing the prods. to detect
CC differences. The primers used in the amplification comprise a primer
CC consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
CC directed primer, comprising a sequence complementary to an adaptor
CC segment. The present sequence is an example of a SSR primer, which is
CC flanked at its 5'-end by degenerate nucleotides. The method represents a
CC modified amplified fragment length polymorphism assay, which is partic.
CC useful for genome fingerprinting, i.e. for genetic trait marking and
CC germplasm comparisons
XX
XX Sequence 18 BP; 0 A; 0 C; 7 G; 8 T; 0 U; 3 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.4e+03;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2317 CTTGTGTGTGTGTGTGT 2332
DB 3 HTGTGTGTGTGTGTGT 18

RESULT 1277
AAT27915
ID AAT27915 standard; DNA; 18 BP.
XX AC
XX AAT27915;
XX
XX 28-JAN-1997 (first entry)
DT
XX
XX 5'-anchored simple sequence repeat primer VHV(GT)7.5.
DE
XX
XX Detection; polymorphism; perfect compound simple sequence repeat;
KW adaptor directed primer; genome; genetic; fingerprinting;
KW amplified fragment length polymorphism assay; microsatellite region;
KW genetic trait marking; germplasm comparisons; 5'-anchored; ss.
XX
XX Synthetic.
OS
XX
XX WO9617082-A2.
PN
XX
XX 06-JUN-1996.
PD
XX
XX 21-NOV-1995; 95WO-US015150.
PF
XX
XX

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PR 28-NOV-1994; 94US-00346456.
XX
PA (DUPO ) DU PONT DE NEMOURS & CO E I.
XX
PI Morgante M, Vogel JM;
XX
XX WPI; 1996-277795/28.
DR
XX
XX Modified amplified fragment length polymorphism assay - for detection of
PT polymorphism esp. in micro:satellite regions.
XX
PS Example 1; Page 77; 173pp; English.
XX
CC Detecting polymorphisms between 2 nucleic acid samples, esp. in
CC microsatellite regions, comprises digesting the nucleic acid to generate
CC fragments, ligating adaptor segments to their ends, amplifying them using
CC primer directed amplification and comparing the prods. to detect
CC differences. The primers used in the amplification comprise a primer
CC consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
CC directed primer, comprising a sequence complementary to an adaptor
CC segment. The present sequence is an example of a SSR primer, which is
CC flanked at its 5'-end by degenerate nucleotides. The method represents a
CC modified amplified fragment length polymorphism assay, which is partic.
CC useful for genome fingerprinting, i.e. for genetic trait marking and
CC germplasm comparisons
XX
SQ Sequence 18 BP; 0 A; 0 C; 8 G; 7 T; 0 U; 3 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.4e+03;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2334 CGTGTGTGTGTGTGTG 2349
Db 3 VGTGTGTGTGTGTG 18

RESULT 1278
AAS21755/C
ID AAS21755 standard; DNA; 20 BP.
XX
AC AAS21755;
XX
XX 21-NOV-2001 (first entry)
XX
XX Mouse Survivin antisense oligonucleotide #57.
XX
XX Survivin; human; mouse; cytostatic; antisense oligonucleotide;
KW hyperproliferative condition; cancer; apoptosis; cytokinesis; ss.
XX
XX Mus musculus.
OS Synthetic.
XX
XX WO200157059-A1.
PN
XX
XX 09-AUG-2001.
PD
XX
XX 30-JAN-2001; 2001WO-US002939.
PF
XX
XX 02-FEB-2000; 2000US-00496694.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Bennett CF, Ackermann EJ, Swayze EE, Cowsett LM;
PI
XX
XX WPI; 2001-48863/53.
DR
XX
XX Novel antisense compounds for modulating the expression of Survivin and
PT treatment of cancer.
XX
XX Example 18; Page 62; 120pp; English.
PS
XX
XX The invention relates to antisense oligonucleotides targeted to a nucleic
CC

```

```

CC acid molecule encoding human Survivin, where the antisense
CC oligonucleotide inhibits the expression of human Survivin. These
CC antisense oligonucleotides are used in the treatment of an animal
CC suffering from a disease or condition associated with Survivin, e.g. a
CC hyperproliferative condition such as cancer, and comprises administering
CC a therapeutically or prophylactically effective amount of the antisense
CC oligonucleotide so that expression of Survivin is inhibited. The
CC oligonucleotides can also be used to treat a human suffering from a
CC disease or condition characterised by a reduction in apoptosis comprising
CC administering the antisense oligonucleotide to a human. In addition, the
CC antisense oligonucleotide and a cytotoxic chemotherapeutic agent e.g.
CC taxol or cisplatin, can be used to modulate apoptosis, cytokinesis or the
CC cell cycle, or inhibit the proliferation in a cancer cell by contacting
CC the cell with the antisense oligonucleotide. AAS21521-AAS21768 represent
CC Survivin nucleic acids, and antisense oligonucleotides targeted to
CC Survivin, used in the method of the invention
XX
SQ Sequence 20 BP; 11 A; 2 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3458 AAGTTTATATATATCTATAT 3477
Db 20 ATGTTTATATATATATATGT 1

RESULT 1279
AAQ28311/C
ID AAQ28311 standard; DNA; 20 BP.
XX
XX AAQ28311;
AC
XX
XX 27-AUG-2003 (revised)
DT 25-MAR-2003 (revised)
DT 12-FEB-1993 (first entry)
XX
XX AmEPV Spheroidin primer RM92.
XX
XX Entomopoxvirus; non-essential; regulatory sequences; vector; PCR;
KW polymerase chain reaction; amplify; ss.
XX
XX Amsacta moorei entomopoxvirus.
OS
XX
XX WO9214818-A2.
PN
XX
XX 03-SEP-1992.
PD
XX
XX 12-FEB-1992; 92WO-US000855.
PF
XX
XX 19-FEB-1991; 91US-00657584.
PR
XX
XX 30-JAN-1992; 92US-00827685.
PR
XX
XX (UYFL ) UNIV FLORIDA.
PA
XX
XX Moyer RW, Hall RL, Gruidl ME;
PI
XX
XX WPI; 1992-316172/38.
DR
XX
XX New viral vectors and chimeric vaccines - comprise entomopoxvirus
PT expression system contg. spheroidin or thymidine kinase sequences.
XX
XX Disclosure; Fig 4; 110pp; English.
XX
XX The sequences given in AAQ28303 and AAQ28309-13 are PCR primers which
CC were used to amplify and isolate the Entomopoxvirus Amsacta moorei
CC (AmEPV) spheroidin DNA sequence and associated regulatory regions. The
CC isolated sequence contained six open reading frames encoding the
CC spheroidin protein itself and also other structural or regulatory genes
CC associated with spheroidin. EPV spheroidin has no significant amino acid
CC homology to any previously reported protein. It is a non- essential
CC protein which makes it desirable as a site for the insertion of exogenous

```

CC DNA. The spheroidin gene is naturally expressed at high levels. Small
 CC fragments of the surrounding DNA can be used as regulatory sequences if
 CC placed in operative association with foreign DNA. (Updated on 25-MAR-2003
 CC to correct PN field.) (Updated on 27-AUG-2003 to correct OS field.)
 XX
 SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3715 GAGGTGTCACCCAAACCGGC 3734
 Db 20 GAGGTGTTACCAACCAAGGC 1

RESULT 1280
 AAQ61458
 ID AAQ61458 standard; DNA; 20 BP.
 XX
 AC AAQ61458;
 XX
 DT 25-MAR-2003 (revised)
 DT 17-MAY-1994 (first entry)
 XX
 DE PCR primer ML51 to amplify M.tuberculosis rpsL gene fragment.
 XX
 DE streptomycin; antibiotic; susceptibility; sensitive; resistant; rpsL;
 KW mutant; small ribosomal subunit; S12 ribosomal protein;
 KW polymerase chain reaction; Mycobacterium tuberculosis; ss.
 XX
 OS Synthetic.
 XX
 PN WO9322454-A1.
 XX
 PD 11-NOV-1993.
 XX
 XX 30-APR-1993; 93WO-EP001063.
 XX
 PR 30-APR-1992; 92US-00875940.
 PR 14-AUG-1992; 92US-00929206.
 PR 17-SEP-1992; 92FR-00011098.
 PR 16-APR-1993; 93FR-00004545.
 XX
 PA (INSP) INST PASTEUR.
 PA (MEDI-) MEDICAL RES COUNCIL.
 PA (ASSI-) ASSISTANCE PUBLIQUE.
 PA (UYPA-) UNIV CURIE PARIS VI P & M.
 PA (UYBE-) UNIV BERNE.
 XX
 PI Heym B, Cole S, Young D, Zhang Y, Honore N, Telenti A, Bodmer T;
 XX
 DR WPI; 1993-368812/46.
 XX
 XX Rapid detection of antibiotic resistance in Mycobacteria - esp.
 PT isoniazid, rifampicin or streptomycin resistance in tuberculosis by
 PT detecting mutation in katG, rpoB or rpsL genes.
 XX
 PS Example 2; Page 51; 97pp; English.
 XX
 CC The rpsL gene of M.leprae encodes the S12 protein of the small ribosomal
 CC subunit that is responsible for resistance to streptomycin. Two primers
 CC were designed based on this sequence and were used in a PCR amplification
 CC of M.tuberculosis DNA. Sequence analysis of the 306bp amplified fragment
 CC showed 28 differences between the rpsL gene from M.leprae (AAQ61453) and
 CC M.tuberculosis (AAQ61454). In streptomycin resistant strains, a single
 CC amino acid substitution due to a mutation in codon 43 (wild-type AAG
 CC mutated to AGG) was identified; substitution of Lys42 by Arg results in
 CC resistance to streptomycin. (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1990 CCACCTTCAACGACGTGGT 2009
 Db 1 CCCACATTCAGCAGCTGGT 20

RESULT 1281
 AAQ64159/c
 ID AAQ64159 standard; DNA; 20 BP.
 XX
 AC AAQ64159;
 XX
 DT 25-MAR-2003 (revised)
 DT 03-FEB-1995 (first entry)
 XX
 DE Primer for amplifying tyrosine kinase receptor coding sequence.
 XX
 KW Tyrosine kinase; receptor; proto-oncogene; trk; detection; diagnosis;
 KW antibody; treatment; tumour; antisense; ss.
 XX
 OS Synthetic.
 XX
 PN DE4239817-A1.
 XX
 PD 01-JUN-1994.
 XX
 PF 26-NOV-1992; 92DE-04239817.
 XX
 XX 26-NOV-1992; 92DE-04239817.
 XX
 PA (CHEM-) CHEMOTHERAPEUTISCHES FORSCHUNG.
 XX
 PI Streibhardt K, Ruebsamen-Waigmann H, Holtrich U;
 XX
 DR WPI; 1994-184380/23.
 XX
 PT New protein tyrosine kinase and related nucleic acid - vectors,
 PT transformed cells, etc., useful for diagnosis and treatment of tumours.
 XX
 PS Example 1; Page 8; 9pp; German.
 XX
 CC Three primers (AAQ64159-Q64161) were used to amplify regions of the
 CC protein tyrosine kinase receptor. The gene encoding the receptor is
 CC related to the trk proto-oncogene. Antibodies against the encoded
 CC polypeptide are useful for diagnosis and for the treatment of tumours.
 CC The antibodies may also be radiolabelled or coupled to a cytotoxin for
 CC destruction of cancer cells. Antisense nucleic acid can be used to
 CC inhibit gene expression. (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1798 AGTGACGCTGCTCCTTTGG 1817
 Db 20 AGTGATGCTGGACCTATGG 1

RESULT 1282
 AAQ45172/c
 ID AAQ45172 standard; DNA; 20 BP.
 XX
 AC AAQ45172;
 XX
 DT 25-MAR-2003 (revised)
 DT 20-OCT-1994 (first entry)
 XX
 DE Hepatitis B primer MD 123.
 XX

KW HLA DQ; Factor IX; Hepatitis B; Rubella; detection; amplification;
KW primer; polymerase chain reaction; PCR; blood; anticoagulant; salt;
KW enzymatic amplification; ss.
XX Synthetic.
XX EP590327-A2.
PN
XX
PD 06-APR-1994.
XX
XX 31-AUG-1993; 93EP-00113861.
PF
XX 11-SEP-1992; 92CH-00002875.
PR
XX (HOFF) HOFFMANN LA ROCHE & CO AG F.
PA
XX Burckhardt J;
PI
XX WPI; 1994-110893/14.
DR
XX Amplification and detection of nucleic acid in unprocessed blood - opt.
PT contg. anticoagulant, in presence of controlled concn. of salt, for
PT detecting genetic sequences or microorganisms..
PT
XX Disclosure; Page 9; 29pp; English.
PS
XX Amplification of nucleic acid from a blood sample by enzymatic
CC amplification is new. No prep. of the blood sample otherwise necessary
CC to purify the nucleic acid sequences to be amplified is performed and
CC the proportion of the sample in the reaction mixt. is greater than 5
CC vol.% if a specific ant. of salt is present in the reaction mixt. The new
CC process was exemplified using HLA DQ, Factor IX, Hepatitis B and Rubella
CC DNA and primers. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 9 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 925 TTCTCTTCATCTCTGGT 944
DB 20 TTCTCTTCATCTCTGGT 1
RESULT 1283
AAQ66802/c
ID AAQ66802 standard; DNA; 20 BP.
XX
AC AAQ66802;
XX
XX 25-MAR-2003 (revised)
DT 18-JAN-1995 (first entry)
XX
XX Spheroidin gene primer RM92.
DE
XX Spheroidin; gene expression; vector; insect cell culture;
KW mammal cell culture; AMEPV; Amsacta moorei; entomopoxvirus; PCR;
KW polymerase chain reaction; primer; ss.
XX
OS Synthetic.
OS
XX WO9413812-A2.
PN
XX 23-JUN-1994.
PD
XX 07-DEC-1993; 93WO-US011907.
PF
XX 07-DEC-1992; 92US-00991867.
PR
XX (UYFL) UNIV FLORIDA.
PA
XX Moyer RW, Hall RL, Gruidl ME;
PI

XX WPI; 1994-217887/26.
DR
XX New entomopoxvirus polynucleotide sequences, proteins and vectors - are
PT used for expression of heterologous proteins in both insect and mammalian
PT host cells.
PT
XX Disclosure; Page 75; 118pp; English.
PS
XX An AMEPV clone spanning a central region of the spheroidin gene was
CC isolated by PCR amplification of AMEPV genomic DNA using the primers
CC given in AAQ66802-03. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 3715 GAGGTGTACCCAAACCGGC 3734
DB 20 GAGGTGTACCCAAACCGGC 1
RESULT 1284
AAQ62462/c
ID AAQ62462 standard; cDNA; 20 BP.
XX
AC AAQ62462;
XX
XX 25-MAR-2003 (revised)
DT 09-NOV-1994 (first entry)
XX
XX HEK-2 receptor primer P6(4).
DE
XX Human embryonal kinase; HEK; protein tyrosine kinase; PTK; tumour;
KW cancer; therapy; amplification; primer; polymerase chain reaction; PCR;
KW ss.
XX Synthetic.
OS
XX DE4233782-A1.
PN
XX 14-APR-1994.
PD
XX 07-OCT-1992; 92DE-04233782.
PF
XX 07-OCT-1992; 92DE-04233782.
PR
XX (CHEM-) CHEMOTHERAPEUTISCHES FORSCHUNG.
PA
XX Streibhardt K, Ruebsamen-Waigmann H, Holtrich U;
XX WPI; 1994-127194/16.
DR
XX Human embryonal kinase 2-receptor protein - useful in tumour diagnosis
PT and therapy.
PT
XX Example 1; Page 10; 11pp; German.
PS
XX RNA from human embryonic tissue was isolated. With the use of primer
CC P6(4) PTK-specific cDNA was synthesised. The cDNA was amplified using
CC primers P6(4) and N5. A 2097 bp DNA fragment was obtained. Primers E3,
CC P12 and E6 were then used in the isolation of the C-terminal of the HEK2
CC receptor gene. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1798 AGTGACGTCTGTCTTTGG 1817

```

Db      ||||| ||||| ||||| ||||| |||||
      20 AGTGATGCTCGACCATGG 1

RESULT 1285
AAT17130
ID AAT17130 standard; DNA; 20 BP.
XX
AC AAT17130;
XX
DT 25-MAR-2003 (revised)
DT 03-JUL-1996 (first entry)
XX
XX Primer for cGMP-phosphodiesterase beta-subunit gene amplification.
DE
DE DE
KW Primer; human; cGMP-phosphodiesterase; beta-subunit; mutation; PCR;
KW polymerase chain reaction; eye; rod; retina; photoreceptor;
KW retinitis pigmentosa; diagnostic; prenatal diagnosis; ss.
XX
OS Synthetic.
XX
XX US5498521-A.
XX
XX 12-MAR-1996.
XX
XX 11-MAR-1993; 93US-00033081.
XX
XX 24-JAN-1990; 90US-00469215.
XX
XX 11-DEC-1991; 91US-00805123.
XX
XX (HARD ) HARVARD COLLEGE.
XX
XX Berson EL, Dryja TP;
XX
XX WPI; 1996-159684/16.
XX
XX Diagnosis of hereditary retinal degenerative diseases e.g. retinitis
XX pigmentosa, - caused by a human photoreceptor protein mutation, by
XX detection of the mutation by PCR amplification or hybridisation methods.
XX
XX Example 9; Col 15; 71pp; English.
XX
XX This antisense primer is derived from exon-5 of the human retinal rod
XX cGMP-phosphodiesterase beta-subunit (PDE-beta) gene, and may be used for
XX PCR amplification and sequencing of normal and mutant forms of the PDE-
XX beta gene. The primer may be used along with sense primer AAT17129 or
XX AAT17135 to detect a variant with a C-to-T transition at position 11638
XX in exon-5, resulting in a nonsense mutation (Gln298X) (e.g. in patients
XX AR77 and AR120) linked with autosomal recessive retinitis pigmentosa.
XX Mutations in the rhodopsin and retinal degradation slow protein genes are
XX also implicated in retinitis pigmentosa. Detection of any of these
XX mutations in a foetus or patient may be used in diagnosis. (Updated on 25
XX -MAR-2003 to correct PF field.)
XX
SQ Sequence 20 BP; 1 A; 12 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 319 CCCATCCCTCCATCTCTG 338
Db 1 CCCTATCCCTCCCTCTCTG 20

RESULT 1286
AAT27015/c
ID AAT27015 standard; cDNA; 20 BP.
XX
AC AAT27015;
XX
XX AAT27015;
XX
DT 25-MAR-2003 (revised)
DT 10-SEP-1996 (first entry)

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XX Kappa fatty acid hydroxylase fah12 gene PCR primer HR1.
DE
XX Kappa fatty acid hydroxylase; lesquerolic acid; ricinoleic acid;
KW transgenic plant; oilseed; seed oil; rapeseed; Arabidopsis; Crambe;
KW Brassica juncea; canola; flax; sunflower; safflower; cotton; cuphea;
KW soybean; peanut; coconut; oil palm; corn; fah12; castor;
KW Ricinus communis; primer; PCR; polymerase chain reaction; ss.
XX
OS Synthetic.
XX
XX WO9610075-A1.
XX
XX 04-APR-1996.
XX
XX 25-SEP-1995; 95WO-US011855.
XX
XX 26-SEP-1994; 94US-00314596.
XX
XX 11-OCT-1994; 94US-00320982.
XX
XX 20-SEP-1995; 95US-00530862.
XX
XX (SOME/) SOMERVILLE C.
XX (BROU/) BROUN P.
XX (VLOO/) VAN DE LOO F J.
XX
XX Somerville C, Broun P, Van De Loo FJ;
XX WPI; 1996-200914/20.
XX
XX Prodn. of hydroxylated fatty acids, e.g. ricinoleic or lesquerolic acid -
XX in genetically modified plants such as rapeseed, flax, sunflower or
XX cotton, contg. a fatty acid hydroxylase gene.
XX
XX Example 1; Page 38; 105pp; English.
XX
XX PCR primers HP2 (AAT27014) and HR1 (AAT27015) were designed to amplify a
XX 700 bp fragment of the kappa fatty acid hydroxylase fah12 gene of castor.
XX PCR amplification was used to detect the fah12 sequence in Arabidopsis
XX plants transformed, by Agrobacterium tumefaciens-mediated transformation,
XX with the fah12 gene on binary Ti plasmid pB6. Transgenic plants were
XX identified that showed altered levels of hydroxylated fatty acids, e.g.
XX ricinoleic acid and lesquerolic acid. (Updated on 25-MAR-2003 to correct
XX PR field.)
XX
SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2982 CAGGGCTTTTCTGGCACCG 3001
Db 20 CAAGGCGTTTCTGTACCG 1

RESULT 1287
AAT38287
ID AAT38287 standard; DNA; 20 BP.
XX
XX AAT38287;
XX
XX 25-MAR-2003 (revised)
XX 14-MAY-1997 (first entry)
XX
XX Degenerate PCR primer for protein kinase cDNA isolation.
XX
XX Protein kinase; treatment; disorder; cancer; human; primer; PCR;
KW foetal liver; degenerate; polymerase chain reaction; ss.
XX
OS Synthetic.
XX
XX WO9628554-A1.
XX

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PD 19-SEP-1996.
XX
PF 15-MAR-1996; 96WO-JP000660.
XX
PR 16-MAR-1995; 95JP-00057104.
XX
PA (CHUS ) CHUGAI SEIYAKU KK.
XX
PI Nezu J;
XX
PI Nezu J;
XX
DR WPI; 1996-433826/43.
XX
XX
PT DNA encoding protein kinase - for potential treatment of protein kinase
PT activity related disorders and cancer.
XX
PS Example A-1; Page 23; 30pp; Japanese.
XX
XX
CC The present sequence is a degenerate PCR primer for protein kinase (PK)
CC cDNA isolation. The PK may be used to treat disorders related to abnormal
CC PK activity, and cancer. Human foetal liver polyA+ RNA was PCR amplified,
CC and the products subcloned, sequenced and used to produce the plasmids
CC pLKB1-1 and pLKB1-2. When the coding region of pLKB1-1 was isolated by
CC restriction digest, and analysed by northern blotting against polyA+ RNA
CC prepared from various human organs and cultured cells, weak expression
CC was detected in almost all tissue and cell types. (Updated on 25-MAR-2003
CC to correct PA field.)
XX
SQ Sequence 20 BP; 5 A; 1 C; 4 G; 4 T; 0 U; 6 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 70.0%; Pred. No. 1.5e+03;
Matches 14; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

QY 1288 GTAGCGGTGAAGTGTGAA 1307
DB |||||:||||:||||
1 GTGCGGTGAATGTTNAA 20

RESULT 1288
AAV01150/c
ID AAV01150 standard; DNA; 20 BP.
XX
AC AAV01150;
XX
XX
DT 23-MAR-1998 (first entry)
XX
DE Homeobox 7 PCR primer for universal mammalian STS's.
XX
XX PCR primer; polymerase chain reaction; amplification; UM-STS;
KW universal mammalian sequence tagged site; genomic map; clone; ss.
XX
OS Synthetic.
XX
XX WO9731012-A1.
XX
XX 28-AUG-1997.
XX
XX 18-FEB-1997; 97WO-US002403.
XX
XX 22-FEB-1996; 96US-0012061P.
XX
XX (UNMI ) UNIV MICHIGAN.
XX
XX (UNMS ) UNIV MICHIGAN STATE.
XX
XX Brewer GJ, Venta PJ, Yuzbasiyan-Gurkan V;
XX
XX WPI; 1997-435083/40.
XX
XX New oligonucleotide primers amplifying gene regions conserved among
PT mammals - useful for developing genomic maps, isolating clones and making
PT cross-species comparisons.
XX
XX Claim 1; Page 9; 26pp; English.
XX

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```

XX
CC The present sequence represents a specifically claimed oligonucleotide
CC PCR primer. The oligonucleotide can be used for polymerase chain reaction
CC (PCR) amplification of DNA, specifically regions of specific genes that
CC are conserved among mammalian species, i.e. pairs of oligonucleotides
CC from the present specification represent universal mammalian sequence-
CC tagged site (UM-STS) primers. The primers are used to develop genomic
CC maps, to isolate clones from libraries, to make cross-species comparisons
CC and to develop additional genetic markers. UM-STS allow genomic
CC comparisons to be made between more species
XX
SQ Sequence 20 BP; 3 A; 8 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1348 GAGATGGAGATGATGAAGAT 1367
DB |||||:||||:||||
20 GAGCTGGAGAGCTGAAGAT 1

RESULT 1289
AAT95010/c
ID AAT95010 standard; DNA; 20 BP.
XX
AC AAT95010;
XX
XX
DT 05-MAR-1998 (first entry)
XX
XX Castor kappa hydroxylase fah12 gene PCR primer HR1.
XX
XX Kappa hydroxylase; fatty acid hydroxylase; fah12 gene;
KW fatty acid unsaturation; transgenic plant; vegetable; seed oil; oilseed;
KW castor; primer; PCR; ss.
XX
XX Synthetic.
XX
XX Ricinus communis.
XX
XX WO9730582-A1.
XX
XX 28-AUG-1997.
XX
XX 06-FEB-1997; 97WO-US002187.
XX
XX 06-FEB-1996; 96US-00597313.
XX
XX (CARN-) CARNEGIE INST WASHINGTON.
XX
XX (MONS ) MONSANTO CO INC.
XX
XX Broun P, Van De Loo F, Boddupalli SS, Somerville C;
XX
XX WPI; 1997-434749/40.
XX
XX Altering the amount of unsaturated fatty acid in plant seeds - by genetic
PT manipulation of fatty acid desaturase or hydroxylase, particularly to
PT increase oleic acid content.
XX
XX Example 1; Page 39; 119pp; English.
XX
XX PCR primers HR1 (AAT95010) and HF2 (AAT95009) were designed to amplify a
XX 700 bp fragment of the castor kappa hydroxylase fah12 gene. They were
XX used to verify the presence of an intact fah12 gene in young leaves of
XX Arabidopsis thaliana plants that had been transformed, via Agrobacterium-
XX mediated transformation, with the castor fah12 gene on binary Ti plasmid
XX pB6. Transgenic Arabidopsis plants produced ricinoleic acid, lesquerolic
XX acid, densipolic acid and auricolic acid. The invention relates to the
XX production of hydroxylated fatty acids by genetically modified plants
XX
SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;

```

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2982 CAGGCTTTTCTGGCACCG 3001
 ||||| ||||| ||||| |||||

Db 20 CAAGGCGTTTCTGGTACCG 1

RESULT 1290
 AAV06269
 ID AAV06269 standard; DNA; 20 BP.
 XX
 AC AAV06269;
 XX
 DT 22-APR-1998 (first entry)
 XX
 DE Puromycin-sensitive aminopeptidase (PSA) antisense oligonucleotide 17.
 XX
 DE Puromycin-sensitive aminopeptidase; PSA; treatment; cancer; psoriasis;
 KW proliferative disorder; hybridise; antisense oligonucleotide; ss.
 KW
 XX Synthetic.
 OS Homo sapiens.
 XX
 PN WO9738114-A1.
 XX
 PD 16-OCT-1997.
 XX
 XX 09-APR-1996; 96WO-EP001518.
 PF
 XX 09-APR-1996; 96WO-EP001518.
 PR
 XX (NOVS) NOVARTIS AG.
 PA
 XX Fontana A, Constam D, Tobler AR, Altmann K, Schlapbach R;
 PI
 XX WPI; 1997-512727/47.
 DR
 XX Isolated protein with puromycin-sensitive aminopeptidase activity - which
 PT may be used in treatment of proliferative disorders, including cancer and
 PT psoriasis.
 PT
 XX Claim 36; Page 116; 141pp; English.
 PS
 XX This antisense oligonucleotide is specifically hybridisable with selected
 CC DNA or RNA deriving from the puromycin-sensitive aminopeptidase (PSA)-99.
 CC This oligonucleotide is used for diagnosing conditions associated with PSA
 CC expression. The human PSA-99 (875 amino acids) and the murine PSA-99 (920
 CC amino acids) both exhibit PSA activity and can be used to generate anti-
 CC PSA antibodies. Cell lines which produce the antibody and host cells
 CC transfected with vector containing nucleic acid molecules encoding the
 CC PSA and the oligonucleotides can be used in assays for identification of
 CC agents which act by targeting PSA, for modulating PSA activity or
 CC function. They can be used to influence proteolytic degradation of
 CC endogenous PSA substrates, proliferation rate or viability of cells or to
 CC induce apoptosis within cells by inhibiting PSA activity. Agents which
 CC can diminish PSA activity in cells, by modulation of the amount of PSA in
 CC cells due to modulation of PSA synthesis, may be used in treatment of
 CC proliferative diseases, including tumours such as leukaemias and
 CC carcinomas or epithelial disorders like psoriasis
 XX
 SQ Sequence 20 BP; 5 A; 3 C; 1 G; 11 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3275 TTGTCCTTTTTCAGGAGAAAT 3294
 ||||| ||||| ||||| |||||

Db 1 TTTTCTCTTTTCAATAGAAAT 20

RESULT 1291
 AAV85579/c

ID AAV85579 standard; DNA; 20 BP.
 XX
 AC AAV85579;
 XX
 DT 10-FEB-1999 (first entry)
 XX
 DE LRP5 PCR primer GI 1F.
 XX
 DE LRP5; LDL-receptor related protein; LRP-3; IDDM; diabetes; endocytosis;
 KW insulin dependent diabetes mellitus; autoimmune disease;
 KW glomerulonephritis; inflammation; viral infection; osteoporosis;
 KW hypercholesterolemia; Alzheimer's disease; low density lipoprotein;
 KW PCR primer; ss.
 XX
 XX Synthetic.
 OS Homo sapiens.
 XX
 PN WO9846743-A1.
 XX
 PD 22-OCT-1998.
 XX
 XX 15-APR-1998; 98WO-GB001102.
 PF
 XX 15-APR-1997; 97US-0043553P.
 PR
 XX 05-JUN-1997; 97US-0048740P.
 XX
 PA (WELL) WELLCOME TRUST LTD.
 PA (MERI) MERCK & CO INC.
 XX
 XX Todd JA, Hess JW, Caskey CT, Cox RD, Gerhold D, Hammond H;
 PI Hey P, Kawaguchi Y, Merriam TR, Metzker ML, Nakagawa Y;
 PI Phillips MS, Twells RCJ;
 XX
 XX WPI; 1998-594573/50.
 DR
 XX New isolated LDL-receptor related protein - used to develop products for
 PT treating, e.g. elevated triglyceride levels, diabetes, autoimmune
 PT disorders, inflammation or Alzheimer's disease.
 PT
 XX Claim 12; Page 98; 200pp; English.
 PS
 XX The present invention describes LRP5 (low density lipoprotein (LDL)
 CC receptor related protein, previously designated LRP-3). AAV85552 to
 CC AAV85586 represent PCR primer used for obtaining LRP5 cDNA. Nucleic acid
 CC molecules (NAMS) encoding LRP5 can be used for determining if an
 CC individual is susceptible to insulin dependent diabetes mellitus (IDDM).
 CC The NAMS or proteins can be used for reducing triglyceride levels in the
 CC serum of an individual. Therapies that affect LRP5 may also be useful in
 CC the treatment of autoimmune diseases such as glomerulonephritis, diseases
 CC and disorders involving disruption of endocytosis and/or antigen
 CC presentation, cytokine clearance and/or inflammation, viral infection,
 CC pathogenic bacterial toxin contamination, elevation of free fatty acids
 CC or hypercholesterolemia, type 2 diabetes, osteoporosis, Alzheimer's
 CC disease and cardiovascular disease. Products from the present invention
 CC can also be used for detection, diagnosis and drug screening
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 157 GCTCATCTCTGGGAGATGA 176
 ||||| ||||| ||||| |||||

Db 20 GCTCATCTCTGGGAGAGA 1

RESULT 1292
 AAV14510/c

ID AAV14510 standard; DNA; 20 BP.
 XX
 AC AAV14510;
 XX
 AC

DT 27-AUG-2003 (revised)
 DT 20-MAY-1998 (first entry)
 XX
 DE Primer RM92 for AmEPV entomopoxvirus spheroidin gene.
 XX
 KW Entomopoxvirus; spheroidin gene; AmEPV; thymidine kinase; promoter;
 KW insect control; viral vaccine; PCR primer; amplify; ss.
 XX
 OS Synthetic.
 OS Amsacta moorei entomopoxvirus.
 XX
 PN US5721352-A.
 XX
 PD 24-FEB-1998.
 XX
 XX 22-NOV-1993; 93US-00107755.
 PF
 PR 19-FEB-1991; 91US-00657584.
 PR 30-JAN-1992; 92US-00827685.
 PR 12-FEB-1992; 92WO-US000855.
 XX
 PA (UYFL) UNIV FLORIDA RES FOUND.
 XX
 XX Hall RL, Gruidl ME, Moyer RW;
 PI WPI; 1998-168476/15.
 DR
 PT New Entomopoxvirus nucleic acid sequences - used in DNA constructs and
 PT vectors for expression of heterologous genes in, e.g. insect cells.
 XX
 PS Example 5; Col 22; 55pp; English.
 XX
 CC This sequence is a primer for the Amsacta moorei entomopoxvirus (AmEPV)
 CC spheroidin gene. The amplified sequence is an example of the gene of the
 CC invention, which encodes a 115 kDa protein. EPV spheroidin and thymidine
 CC kinase promoters can be used in DNA constructs and vectors for expression
 CC of heterologous genes in insects or mammalian cells, e.g. vectors
 CC containing Bacillus thuringiensis toxin genes for use in insect control,
 CC or recombinant vaccinia or swinepox viruses for use as viral vaccines.
 CC (Updated on 27-AUG-2003 to correct OS field.)
 XX
 XX Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
 SQ

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. NO. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3715 GAGGTGTACCCAAACCGGC 3734
 |||||
 DB 20 GAGGTGTATACCAACGAGC 1

RESULT 1293
 AAX76914/C
 ID AAX76914 standard; DNA; 20 BP.
 XX
 AC AAX76914;
 XX
 DT 05-AUG-1999 (first entry)
 XX
 DE Probe used to test nucleic acid detection method.
 DE
 XX Nucleic acid detection; probe; ss.
 XX
 OS Synthetic.
 XX
 PN JP11127862-A.
 XX
 XX 18-MAY-1999.
 PD
 XX 31-OCT-1997; 97JP-00300943.
 PF
 XX 31-OCT-1997; 97JP-00300943.
 PR

XX (CANO) CANON KK.
 XX
 DR WPI; 1999-350323/30.
 XX
 PT Detection of a target nucleic acid - using a labelled unit with labels
 PT capable of interactive action in a phenomenon of electron flow in double
 PT helix structure.
 XX
 PS Example 3; Page 5; 9pp; Japanese.
 XX
 CC This sequence is a probe used to test the method of the invention. The
 CC method is for the detection of a hybrid of a target nucleic acid and a
 CC probe nucleic acid in a sample comprises: (1) preparation of a labelled
 CC unit composed of 1st and 2nd labelled substances capable of interactive
 CC action in a phenomenon of electron flow in double helix structure in the
 CC presence of a hybrid via a linker; (2) addition of a probe nucleic acid
 CC having a complementary base sequence to the base sequence of target
 CC nucleic acid; (3) placing the sample under conditions capable of forming
 CC the target nucleic acid and the probe nucleic acid to give a hybrid; (4)
 CC mixing the sample capable of forming the hybrid and the labelled unit;
 CC (5) detection of the change in the 1st and/or 2nd labelled substances;
 CC caused by their interaction; and (6) detection of the presence of the
 CC hybrid in the sample. The method can be used for the detection of a
 CC target nucleic acid having a specified base sequence. The method allows
 CC for the simple and easily operable detection of labelled nucleic acids
 CC without complicated synthesis of labelled probe nucleic acids for
 CC respective base sequence
 XX
 SQ Sequence 20 BP; 11 A; 0 C; 0 G; 9 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. NO. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2832 ATATATATATATATACATATA 2851
 |||||
 DB 20 ATATATATATATTTATATA 1

RESULT 1294
 AAZ10086/C
 ID AAZ10086 standard; DNA; 20 BP.
 XX
 AC AAZ10086;
 XX
 DT 20-MAR-2003 (revised)
 DT 28-OCT-1999 (first entry)
 XX
 XX PCR primer RM92 for Amsacta moorei entomopoxvirus gene sequences.
 DE
 XX Spheroidin; Entomopoxvirus; expression system; replication;
 KW heterologous gene expression; thymidine kinase; poxvirus; vaccinia;
 KW swinepox virus; insect pest control; immunity; PCR primer; ss.
 XX
 OS Synthetic.
 OS Amsacta moorei entomopoxvirus.
 XX
 PN US5935777-A.
 XX
 PD 10-AUG-1999.
 XX
 PF 17-OCT-1995; 95US-00544332.
 XX
 PR 19-FEB-1991; 91US-00657584.
 PR 30-JAN-1992; 92US-00827685.
 PR 12-FEB-1992; 92WO-US000855.
 PR 07-DEC-1992; 92US-00991867.
 PR 22-NOV-1993; 93US-00107755.
 XX
 PA (UYFL) UNIV FLORIDA RES FOUND INC.
 XX
 XX Moyer RW, Hall RL, Gruidl ME, Li Y;
 PI

XX WPI; 1999-457596/38.
 XX Novel expression system for the expression of heterologous sequences in
 PT insect and mammalian host cells.
 XX Example 5; Col 26; 72pp; English.
 XX PCR primers AA210086-87 were used to amplify Amsacta moorei
 CC entomopoxvirus gene sequences. These DNA sequences are described to make
 CC expression systems of the invention. The specification describes an
 CC entomopoxvirus (EPV) expression system that is capable of directing the
 CC replication and expression of a heterologous gene in a selected host
 CC cell. The expression system comprises an EPV promoter sequence operably
 CC linked to the selected heterologous gene sequence. The expression system
 CC is used for the expression of heterologous sequences and the production
 CC of selected proteins in insect and mammalian host cells e.g. human,
 CC rodent and primate cells. EPV thymidine kinase and spheroidin genes can
 CC also be used in vertebrate poxviruses such as vaccinia and swinepox
 CC virus. The expression vectors can also be used for the control of insect
 CC pests through the insertion of a gene encoding an insect toxin into the
 CC expression vector which will infect the target pest and produce large
 CC quantities of the toxin. Spheroidin and thymidine kinase are nonessential
 CC proteins which makes them ideal for the insertion of exogenous DNA and
 CC they are capable of operating in a vertebrate poxvirus (e.g. vaccinia)-
 CC mammalian cell expression vector system. Pox viruses are able to
 CC stimulate cell-mediated and humoral immunity. (Updated on 20-MAR-2003 to
 CC correct PR field.)
 XX Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3715 GAGGTGTACCCAAACCGGC 3734
 Db 20 GAGGTGTACCCAAACCGGC 1
 RESULT 1295
 AA237617/c
 ID AA237617 standard; DNA; 20 BP.
 AC AA237617;
 XX
 XX
 DT 07-JAN-2000 (first entry)
 XX Human mdm2 phosphorothioate oligodeoxynucleotide #147.
 DE
 XX Human mdm2 gene; proliferation; tumour; phosphorothioate; p53; cancer;
 KW antisense; modulation; oligonucleotide; expression; inhibition;
 KW hyperproliferation; blood cancer; brain cancer; breast cancer;
 KW lung cancer; soft tissue cancer; psoriasis; fibrosis; atherosclerosis;
 KW restenosis; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX WO9949065-A1.
 PN 30-SEP-1999.
 PD 26-MAR-1999; 99WO-US006702.
 PP 26-MAR-1998; 98US-00048810.
 PR (ISIS-) ISIS PHARM INC.
 XX Miraglia LJ, Nero P, Graham MJ, Monia BP, Cowse LM;
 XX WPI; 1999-610754/52.
 XX

PT New antisense compounds used to treat eg. hyperproliferative conditions.
 XX Example 9; Page 51; 157pp; English.
 XX AA237473-237738 represent human mdm2 phosphorothioate oligonucleotides.
 CC AA237471, AA237472, AA237739, AA237740 and AA237741 are used in the
 CC exemplification of the present invention. The present invention describes
 CC novel nucleotide antisense compounds, targeted to the 5' untranslated,
 CC translation termination codon, or 3' untranslated region of a nucleic
 CC acid encoding human mdm2, that modulates expression of human mdm2. The
 CC oligonucleotides mediate their effect by antisense inhibition of
 CC hyperproliferative gene expression. The antisense compound is used to
 CC treat an animal having a disease or condition associated with mdm2,
 CC particularly a hyperproliferative condition, more particularly cancer,
 CC especially of the blood, brain, breast, lung or soft tissue, or
 CC psoriasis, fibrosis, atherosclerosis or restenosis
 XX Sequence 20 BP; 4 A; 7 C; 2 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1346 CTCAGATGAGATGATGAG 1365
 Db 20 CTCAGATGAGATGATGAG 1
 RESULT 1296
 AA237679/c
 ID AA237679 standard; DNA; 20 BP.
 XX AA237679;
 AC AA237679;
 XX
 DT 07-JAN-2000 (first entry)
 XX Human mdm2 phosphorothioate oligodeoxynucleotide #209.
 DE
 XX Human mdm2 gene; proliferation; tumour; phosphorothioate; p53; cancer;
 KW antisense; modulation; oligonucleotide; expression; inhibition;
 KW hyperproliferation; blood cancer; brain cancer; breast cancer;
 KW lung cancer; soft tissue cancer; psoriasis; fibrosis; atherosclerosis;
 KW restenosis; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX WO9949065-A1.
 PN 30-SEP-1999.
 PD 26-MAR-1999; 99WO-US006702.
 PP 26-MAR-1998; 98US-00048810.
 PR (ISIS-) ISIS PHARM INC.
 XX Miraglia LJ, Nero P, Graham MJ, Monia BP, Cowse LM;
 XX WPI; 1999-610754/52.
 XX New antisense compounds used to treat eg. hyperproliferative conditions.
 XX Example 9; Page 53; 157pp; English.
 XX AA237473-237738 represent human mdm2 phosphorothioate oligonucleotides.
 CC AA237471, AA237472, AA237739, AA237740 and AA237741 are used in the
 CC exemplification of the present invention. The present invention describes
 CC novel nucleotide antisense compounds, targeted to the 5' untranslated,
 CC translation termination codon, or 3' untranslated region of a nucleic
 CC acid encoding human mdm2, that modulates expression of human mdm2. The
 CC oligonucleotides mediate their effect by antisense inhibition of
 CC hyperproliferative gene expression. The antisense compound is used to

CC treat an animal having a disease or condition associated with mdm2,
 CC particularly a hyperproliferative condition, more particularly cancer,
 CC especially of the blood, brain, breast, lung or soft tissue, or
 CC psoriasis, fibrosis, atherosclerosis or restenosis
 CC
 SQ Sequence 20 BP; 11 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 3462 TTATATATATCTATATATAT 3481
 Db 20 TTATATATATCTTAACTATAT 1
 RESULT 1297
 AAA90967/C
 ID AAA90967 standard; DNA; 20 BP.
 XX AC AAA90967;
 XX
 DT 15-JAN-2001 (first entry)
 XX
 DE Human fatty acid desaturase 2 coding sequence PCR primer TUL3-F1.
 XX
 KW Human; fatty acid desaturase; FADS-1; FADS-2; FADS-3; gene therapy;
 KW liver disease; coronary artery disease; cancer; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1035207-A1.
 XX
 PD 13-SEP-2000.
 XX
 PF 09-MAR-1999; 99EP-00104664.
 XX
 PR 09-MAR-1999; 99EP-00104664.
 XX
 PA (MULT-) MULTIGENE BIOTECH GMBH.
 XX
 PI Weber BHF, Marquardt A;
 XX
 DR WPI; 2000-559875/52.
 XX
 PT Novel cDNA molecules encoding three human fatty acid desaturases, FADS1,
 PT FADS2 and FADS3, useful in the treatment of liver disease, coronary
 PT artery disease and cancer.
 XX
 PS Claim 13; Page 7; 72pp; English.
 XX
 CC This sequence represents a PCR primer used to isolate DNA encoding the
 CC human fatty acid desaturase, FADS-2, of the invention. An antibody
 CC directed against the 3 FADS molecule of the invention (FADS-1, FADS-2,
 CC and FADS-3) is useful for diagnostic or therapeutic purposes. The FADS
 CC coding sequences are useful in gene therapy. The polypeptide and
 CC antibodies are useful in screening for modulating drugs. The polypeptides
 CC are also useful for treating liver disease, coronary artery disease and
 CC cancer. Note: Two copies of the sequence listing are present within this
 CC patent, which contain different sequences. AAA90952 and AAA90955 are both
 CC stated as being SEQ ID 1. AAA90956-A90971, and AAA90972-A90987 are stated
 CC as being SEQ ID's 7-22
 XX
 SQ Sequence 20 BP; 8 A; 8 C; 2 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 2458 GAGGGGCTTTGTTCTGGG 2477
 Db 20 GATGGGCTTTGTTCTGAGG 1

RESULT 1298
 AAA39238
 ID AAA39238 standard; DNA; 20 BP.
 XX AC AAA39238;
 XX
 DT 07-SEP-2000 (first entry)
 DE C-Met PCR primer SEQ ID NO:27.
 XX
 KW Detection; metastasis; melanoma; breast cancer; C-Met; GAINAC; MAGE-3;
 KW CK20; beta-HCG; MAGE-1; melanoma marker gene; tyrosinase; MART-1; MUC-18;
 KW metastatic; tumour; ss.
 XX
 OS Homo sapiens.
 XX
 PN US6057105-A.
 XX
 PD 02-MAY-2000.
 XX
 PF 09-DEC-1997; 97US-00987326.
 XX
 PR 17-MAR-1995; 95US-00406307.
 XX
 PA (NGIC-) NGI CANCER TECH CO LLC.
 XX
 PI Hoon DSB, Schmid P, Conrad AJ;
 XX
 DR WPI; 2000-349569/30.
 XX
 PT Detecting melanoma and breast cancer, detecting subclinical metastasis
 PT and monitoring treatment involves detecting the presence or absence of
 PT nucleic acid targets in the obtained patient's biological sample.
 XX
 PS Example 17; Col 42; 37pp; English.
 XX
 CC The present invention describes a method for detecting (D) metastatic
 CC melanoma cells and breast cancer cells, subclinical metastasis and
 CC monitoring treatment in a patient by amplifying nucleic acid targets (NT)
 CC if present in obtained patient's biological sample, and detecting the
 CC presence of NT which is indicative of the presence of metastatic melanoma
 CC and breast cancer cells. Also described is a kit useful for detecting
 CC melanoma and breast cancer cells comprising a pair of primers for
 CC amplifying NT from a set of breast cancer marker genes which includes C-
 CC Met, GAINAC, MAGE-3, CK20, betaHCG and MAGE-1 or a set of melanoma marker
 CC genes including tyrosinase, MART-1 and MAGE-3 and containers for each
 CC pair of primers. The method is useful for detecting metastatic melanoma
 CC cells and breast cancer cells, subclinical metastasis and for monitoring
 CC treatment in the patient's biological sample such as blood, tumour
 CC draining lymph node, bone marrow and cerebrospinal fluid. The method is
 CC sensitive, specific and detects occult melanoma or breast cancer cells in
 CC the blood of patients with or without clinical evidence of the disease.
 CC The present sequence represents a PCR primer for C-Met, which is used in
 CC an example from the present invention
 XX
 SQ Sequence 20 BP; 0 A; 7 C; 5 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 1809 GTCCTTTGGGTCCTGCTCT 1828
 Db 1 GTCCTTTGGGTCCTGCTCT 20
 RESULT 1299
 AAA61975
 ID AAA61975 standard; DNA; 20 BP.
 XX AC AAA61975;
 XX

| | | | | | |
|-----------------------------------|---|---------------|-----------------------------------|---|---------------|
| DT | 20-NOV-2000 | (first entry) | DT | 26-JUL-2002 | (first entry) |
| XX | Human MEK5 phosphothioate antisense oligonucleotide, SEQ ID NO:27. | | XX | Nucleic acid probe m. | |
| XX | Human MEK5; mitogen-activated protein kinase kinase kinase 5; | | XX | Concentration; quantification; mutation detection; polymorphic; | |
| KW | MEK kinase 5; MAP/ERK kinase kinase 5; ASK1; pro-apoptotic; | | KW | polymerase chain reaction; PCR; probe; ss. | |
| KW | apoptosis signal-regulating kinase 1; programmed cell death; | | XX | Unidentified. | |
| KW | serine/threonine kinase; MAP kinase cascade; JNK/SAPK module; | | XX | EP1046717-A2. | |
| KW | Jun N-terminal kinase/stress-activated protein kinase; p38 module; MKK3; | | XX | 25-OCT-2000. | |
| KW | SEK1; transcription factor modulation; expression inhibition; antisense; | | XX | 20-APR-2000; 2000EP-00108643. | |
| XX | Inflammation; wound healing disorder; phosphorothioate; ss. | | XX | 20-APR-1999; 99JP-00111601. | |
| OS | Homo sapiens. | | XX | (NIBI-) JAPAN BIOINDUSTRY ASSOC. | |
| XX | US6080546-A. | | PA | (AGEN) AGENCY OF IND SCI & TECHNOLOGY. | |
| PN | 27-JUN-2000. | | PA | (KANK-) KANKYO ENG CO LTD. | |
| XX | 23-JUL-1999; 99US-00359757. | | XX | Kurane R, Kanagawa T, Kamagata Y, Kurata S, Yamada K, Yokomaku T; | |
| XX | 23-JUL-1999; 99US-00359757. | | PI | Koyama O, Furusho K; | |
| XX | (ISIS-) ISIS PHARM INC. | | XX | WPI; 2000-657765/64. | |
| XX | Monia BP, Cowseert LM, Gaarde W; | | XX | Determining the concentration of a target nucleic acid, useful e.g. for | |
| PI | WPI; 2000-464034/40. | | XX | detecting genetic mutations, comprises using a fluorescently labeled | |
| DR | Claim 3; Col 39; 35pp; English. | | PT | probe in which emission is reduced by binding to the target nucleic acid. | |
| XX | Antisense compounds useful for treating or preventing infection, | | XX | Example 6; Page 23; 55pp; English. | |
| PT | Inflammation or tumor formation by inhibiting expression of human MEK5. | | CC | The invention relates to the determination of the concentration of a | |
| PS | | | CC | nucleic acid target, using a fluorescently labeled probe which produces | |
| XX | Sequences AAA61956-A61995 represent phosphorothioate antisense | | CC | reduced fluorescence emission when hybridised to the target nucleic acid. | |
| CC | oligonucleotides targeted to the human MEK5 gene, which inhibit its | | CC | The method comprises measuring the reduction in emission caused by | |
| CC | expression. The antisense oligonucleotides were designed to target | | CC | hybridisation. The new method is particularly used to quantify target | |
| CC | different regions of the human MEK5 RNA, and were analysed for their | | CC | nucleic acids by a real-time polymerase chain reaction, e.g. for | |
| CC | effect on MEK5 mRNA levels by quantitative real-time PCR. MEK5 (also | | CC | quantifying microbial cells in co-cultures or symbiotic systems, for | |
| CC | known as mitogen-activated protein kinase kinase kinase 5, MEK kinase 5, | | CC | detecting gene mutations or polymorphisms, and for analysing melting | |
| CC | MAP/ERK kinase kinase 5, apoptosis signal-regulating kinase 1, and ASK1) | | CC | curves of target nucleic acids to determine a Km value. Methods of the | |
| CC | is a dual-specific serine/threonine kinase which mediates cellular | | CC | invention allow target nucleic acids to be quantified quickly, easily and | |
| CC | responses to mitogenic stimuli by activating both the JNK/SAPK (Jun N- | | CC | accurately. Particularly there is no need to remove unbound probe, and no | |
| CC | terminal kinase/stress-activated protein kinase) and p38 modules of MAP | | CC | materials are introduced that inhibit amplification by Taq polymerase (so | |
| CC | kinase cascades. MEK5 is thought to play a critical role in the | | CC | conventional PCR conditions can be used). The specificity of PCR is kept | |
| CC | regulation of apoptosis (programmed cell death) by interacting with other | | CC | high (amplification of primer dimers is delayed), and the limit of | |
| CC | proteins in this cascade and by phosphorylating downstream targets such | | CC | quantitation is reduced. Complex probes are not needed, and amplification | |
| CC | as MKK3 and SEK1. MEK5 also participates in another apoptosis-related | | CC | can be monitored in real time. The working graph for data analysis | |
| CC | signalling cascade involving the modulation of transcription factors. | | CC | (automatically generated by a computer) has a higher correlation | |
| CC | Activation and dimerisation of MEK5 is induced by tumour necrosis factor | | CC | coefficient than conventional graphs so more accurate quantitation is | |
| CC | -alpha (TNF-alpha), these processes being mediated by reactive oxygen | | CC | possible. The current sequence represents a nucleic acid probe of the | |
| CC | species. Thioredoxin is able to associate with MEK5 and inhibit MEK5 | | CC | invention that was used for investigating the effects or the numbers of | |
| CC | kinase activity and hence MEK5-dependent apoptosis. The oligonucleotides | | CC | G(s) in each target nucleic acid, and the number of G(s) in its | |
| CC | of the invention are useful for diagnosis, prevention and treatment of | | CC | corresponding invention nucleic acid probe | |
| CC | conditions associated with MEK5 expression, such as inflammation and | | XX | | |
| XX | wound healing disorders | | XX | | |
| XX | | | XX | | |
| SQ | Sequence 20 BP; 2 A; 5 C; 9 G; 4 T; 0 U; 0 Other; | | SQ | Sequence 20 BP; 12 A; 3 C; 0 G; 5 T; 0 U; 0 Other; | |
| | Query Match 0.4%; Score 15.2; DB 1; Length 20; | | | Query Match 0.4%; Score 15.2; DB 1; Length 20; | |
| | Best Local Similarity 85.0%; Pred. No. 1.5e+03; | | | Best Local Similarity 85.0%; Pred. No. 1.5e+03; | |
| | Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0; | | | Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0; | |
| QY | 3401 ACGGTTTCAGGAGGGGCC 3420 | | QY | 3473 TATATATATATATTTATTGAG 3492 | |
| | | | | | |
| DB | 1 ACGGTTTCAGGAGGGGCC 20 | | DB | 20 TATATATATATTTTGGG 1 | |
| | | | | | |
| RESULT 1300 | | | RESULT 1301 | | |
| ABL57557/C | | | AAC79500/C | | |
| ID ABL57557 standard; DNA; 20 BP. | | | ID AAC79500 standard; DNA; 20 BP. | | |
| XX | | | XX | | |
| AC | ABL57557; | | AC | AAC79500; | |
| XX | | | XX | | |
| DT | 07-FEB-2001 (first entry) | | DT | 07-FEB-2001 (first entry) | |

| | |
|--|---|
| XX | Human p38alpha antisense oligonucleotide SEQ ID 22. |
| XX | Antisense oligonucleotide; p38 mitogen activated protein kinase; MAPK; |
| XX | antirheumatic; antiarthritic; immunosuppressive; cardiant; heart disease; |
| KW | antiinflammatory; autoimmune disease; rheumatoid arthritis; apoptosis; |
| KW | phosphorothioate; ss. |
| XX | |
| XX | Homo sapiens. |
| OS | |
| PN | WO200059919-A1. |
| PD | 12-OCT-2000. |
| XX | |
| XX | 04-APR-2000; 2000WO-US008794. |
| PF | |
| PR | 06-APR-1999; 99US-00286904. |
| XX | |
| XX | (ISIS-) ISIS PHARM INC. |
| PA | |
| XX | |
| XX | Monia BP, Gaarde WA, Nero PS, Mckay R, Popoff I; |
| PI | |
| XX | WPI; 2000-664982/64. |
| DR | |
| XX | |
| XX | Antisense compound targeted to p38 mitogen activated protein kinase |
| PT | inhibits protein kinase and is useful for diagnosing and treating |
| PT | inflammatory, autoimmune and heart disease. |
| PT | |
| XX | |
| XX | Example 2; Page 39; 90pp; English. |
| PS | |
| XX | |
| CC | This invention relates to antisense compounds 8-30 nucleobases in length |
| CC | targeted to the 5'-untranslated region, translational start site, |
| CC | translational termination region or 3'-untranslated region of a nucleic |
| CC | acid encoding a p38 mitogen activated protein kinase (MAPK), where the |
| CC | antisense oligonucleotides inhibit the expression of MAPK. Sequences |
| CC | AAC79480 and AAC79501 represent human p38alpha MAPK and p38beta MAPK cDNA |
| CC | sequences. AAC79481 - AAC79500 and AAC79553 - AAC79570 represent human |
| CC | p38alpha antisense oligonucleotides, while AAC79502 - AAC79521 and |
| CC | AAC79571 - AAC79580 represent human p38beta antisense oligonucleotides. |
| CC | Also included in the invention are a p38alpha cDNA sequence AAC79523 and |
| CC | antisense oligonucleotides AAC79523 - AAC79536 isolated from rat tissue. |
| CC | Murine p38beta MAPK cDNA is represented in AAC79537 and antisense |
| CC | oligonucleotides targeting the sequence are given in AAC79538 - AAC79552. |
| CC | The antisense oligonucleotides have antirheumatic; antiarthritic; |
| CC | immunosuppressive; cardiant and antiinflammatory activity. The antisense |
| CC | oligonucleotides are useful for inhibiting the expression of p38 MAPK in |
| CC | cells or tissues. The oligonucleotides are used for treating an animal |
| CC | with diseases such as inflammatory or autoimmune diseases e.g. rheumatoid |
| CC | arthritis, or heart disease. The oligonucleotides are also useful for |
| CC | inhibiting inflammation or apoptosis |
| XX | |
| XX | Sequence 20 BP; 9 A; 8 C; 1 G; 2 T; 0 U; 0 Other; |
| SQ | |
| Query Match 0.4%; Score 15.2; DB 1; Length 20; | |
| Best Local Similarity 85.0%; Pred. No. 1.5e+03; | |
| Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0 | |
| QY | 2321 GTGTGTGTGTGTGCGTGCT 2340 |
| DB | 20 GTTAGTGTGTGTGCAATGCT 1 |
| RESULT 1302 | |
| AC92851 | |
| ID | AC92851 standard; DNA; 20 BP. |
| XX | |
| AC | AC92851; |
| XX | |
| DT | 27-MAR-2001 (first entry) |
| XX | |
| DE | Human PI3 kinase p55 gamma antisense oligonucleotide, SEQ ID NO:34. |
| XX | |
| KW | Human phosphatidylinositol 3-kinase p55 gamma regulatory subunit; |

| | |
|-------------|--|
| KW | PI3 kinase p55 gamma; hp55-gamma; p55-gamma; PIK3R3; p55PIK; |
| KW | signal transduction; downstream effector; receptor tyrosine kinase; |
| KW | insulin receptor; IR; insulin-like growth factor receptor; IGRF; |
| KW | cell growth; differentiation; apoptosis; developmental regulation; |
| KW | alternative splicing; tumour formation; cancer; inflammation; infection; |
| KW | expression inhibition; phosphothioate; antisense oligonucleotide; ss. |
| XX | |
| OS | Homo sapiens. |
| XX | |
| XX | US6165790-A. |
| XX | |
| XX | 26-DEC-2000. |
| XX | |
| XX | 03-NOV-1999; 99US-004333694. |
| XX | |
| XX | 03-NOV-1999; 99US-004333694. |
| XX | |
| PA | (ISIS-) ISIS PHARM INC. |
| XX | |
| PI | Borchers AH, Cowseert LM, Ward DT; |
| XX | |
| XX | WPI; 2001-101697/11. |
| XX | |
| XX | Novel antisense compound targeted to human p13 kinase p55 gamma |
| PT | specifically hybridizes with and inhibits the expression of human p13 |
| PT | kinase p55 gamma, useful for modulating the expression of p13 kinase p55 |
| PT | gamma in cells. |
| XX | |
| XX | Claim 14; Col 41-42; 39pp; English. |
| XX | |
| CC | Sequences AAC92827-C92906 represent phosphothioate antisense |
| CC | oligonucleotides targeted to the phosphatidylinositol 3-kinase p55 gamma |
| CC | regulatory subunit (PI3 kinase p55 gamma) gene, which inhibit its |
| CC | expression. The antisense oligonucleotides were designed to target |
| CC | different regions of human PI3 kinase p55 gamma species, and were analysed |
| CC | for their effect on PI3 kinase p55 mRNA levels by quantitative real-time |
| CC | PCR. PI3 kinase p55 gamma (also known as hp55-gamma, p55-gamma, PIK3R3 |
| CC | and p55PIK) is one of several PI3 kinase regulatory subunits that may |
| CC | associate with the PI3 kinase catalytic subunit to form a heterodimeric |
| CC | PI3 kinase holoenzyme. PI3 kinases act as downstream effectors of |
| CC | receptor tyrosine kinases such as growth factor and hormone receptors and |
| CC | oncogene products, and are found in association with the cytoplasmic |
| CC | domains of such receptors. PI3 kinase p55 gamma is able to interact with |
| CC | both the insulin receptor (IR) and the insulin-like growth factor |
| CC | receptor (IGFR), which play important roles in growth, differentiation |
| CC | and apoptosis. PI3 kinase p55 gamma is thought to be developmentally |
| CC | regulated, as four distinct mRNA species are found in adult tissues, |
| CC | while only the larger mRNA is expressed in foetal tissues. The |
| CC | oligonucleotides of the invention are useful for diagnosis, prevention |
| CC | and treatment of conditions associated with PI3 kinase p55 expression, |
| CC | such as tumour formation, inflammation and certain infections, and allow |
| CC | expression level modulation of the alternatively spliced forms of PI3 |
| XX | kinase p55 |
| XX | |
| SQ | Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other; |
| | |
| | Query Match 0.4%; Score 15.2; DB 1; Length 20; |
| | Best Local Similarity 85.0%; Pred. No. 1.5e+03; |
| | Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0; |
| | |
| Qy | 3200 AGCTGGAGGATCCCTCCAA 3219 |
| | |
| | 1 AGCTGGAGGATCCATTTCAA 20 |
| Db | |
| | |
| RESULT 1303 | |
| AAH56777 | |
| ID | AAH56777 standard; DNA; 20 BP. |
| XX | |
| XX | AAH56777; |
| XX | |
| XX | 06-SEP-2001 (first entry) |
| DT | |
| XX | |

S. aureus groE operon antisense oligonucleotide SEQ ID NO:425.

Antisense oligonucleotide; groE; groEL; groES; inhibitor; growth; microorganism; Escherichia coli; Streptococcus pneumoniae; diagnosis; Streptococcus pyogenes; Staphylococcus aureus; Pseudomonas aeruginosa; antibacterial; antiviral; antiproliferative; antisense therapy; microbial infection; ss.

Staphylococcus aureus.

WO200136625-A2.

25-MAY-2001.

20-NOV-2000; 2000WO-CA001347.

18-NOV-1999; 99US-0166249P.

(GENE-) GENESENSE TECHNOLOGIES INC.

Wright JA, Young AH, Dugourd D;

WPI; 2001-355633/37.

Novel antisense compounds targeting nucleic acid encoding groEL or groES gene of microorganism, which hybridize with and inhibit expression of the genes, useful to inhibit growth of microorganism having the genes.

Claim 3; Page 53; 110pp; English.

The present invention specifically claims AAH56368 to AAH56832 which are antisense oligonucleotides to nucleotide sequences encoding groE. More generally, antisense compounds (I) comprising antisense oligonucleotides of 5-50 bases targeted to a nucleotide sequence encoding groEL (heat shock protein (HSP)60 (GL) and groES (HSP10) (GS) gene from a microorganism, where the antisense compound is complementary to GL or GS of a microorganism and specifically hybridizes with and inhibits the expression of GL or GS, is claimed. (I) have antibacterial, antiviral and antiproliferative activities, and can be used in antisense therapy and for inhibiting expression of groES or groEL. (I) are useful for inhibiting expression of GL or GS in cells or tissues in vitro. (I) are also useful for inhibiting the growth of a microorganism, or inhibiting the expression of GL or GS gene in a microorganism (a bacterial cell or a virus) having a GL or GS gene which involves administering to the microorganism or to a cell infected with the microorganism, (I). (I) are also useful for treating a mammalian pathological condition mediated by the microorganisms which involves identifying a eukaryotic organism having a pathological condition mediated by microorganisms having a GL or GS gene and administering (I) such that the growth of microorganism is inhibited. The antisense compounds are utilised for diagnostics, therapeutics, prophylaxis and as research reagents and kits, e.g., to prevent or delay microbial infections in humans. They are also useful as molecular weight markers. AAH56362 to AAH56367 and AAH56833 to AAH56854 represent PCR primers for groE sequences which are used in the exemplification of the present invention. AAH56855 to AAH56870 represent groE nucleotide sequence given in the present invention

Sequence 20 BP; 3 A; 2 C; 1 G; 14 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

3115 TTTTATTTTACTTATG 3134
|||||
1 TTTTATTTTCAACTTTTG 20

RESULT 1304
AAD15577
ID AAD15577 standard; DNA; 20 BP.
XX AAD15577;

15-NOV-2001 (first entry)

Human carbonic anhydrase (CA12) protein target DNA #3.

Human; carbonic anhydrase; CA12; genetic disease; antisense target; therapeutic; ss.

Homo sapiens.

WO200161030-A2.

23-AUG-2001.

14-FEB-2001; 2001WO-US004732.

14-FEB-2000; 2000US-00504653.

(BOLL/) BOLLON A P.
(GRAY/) GRAY D M.
(JUSE/) JU-SEOG L.

Bollon AP, Gray DM, Ju-Seog L;

WPI; 2001-529916/58.

Selecting optimal subsequence antisense targets for inhibition of mRNA expression of target mRNA for the therapeutic treatment of genetic disease.

Example 4; Page 23; 87pp; English.

The invention relates to a method for selecting optimal subsequence antisense targets. The method involves preparing an antisense oligonucleotide capable of inhibiting mRNA expression of target mRNA sequences, as well as antisense oligonucleotides capable of binding DNA. The antisense and antigen libraries are useful for preparing therapeutic agents for the treatment of genetic disease. The present DNA sequence is human carbonic anhydrase (CA12) protein target DNA related to the invention. Note: The present sequence is shown as DNA in the specification; however, in vivo, this target sequence would be mRNA

Sequence 20 BP; 2 A; 9 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

528 CCGGCCCATCTCTGCAGGCGG 547
|||||
1 CCGGGCGCAGCCTGCAGCGG 20

RESULT 1305
AAF80771/c
ID AAF80771 standard; DNA; 20 BP.
XX AAF80771;
AC AAF80771;
XX AAF80771;
DT 02-MAY-2001 (first entry)
XX AAF80771/c
DE Human mdm2 phosphorothioate oligonucleotide #145.
XX Antisense; mdm2; hyperproliferation; cancer; psoriasis; ss.
XX Homo sapiens.
XX US6184212-B1.
XX 06-FEB-2001.
XX 26-MAR-1999; 99US-00280805.
XX

```
PR 26-MAR-1998; 98US-00048810.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Miraglia LJ, Nero P, Graham MJ, Monia BP, Cowsett LM;
XX
XX WPI; 2001-190948/19.
XX
PT Novel antisense compound 8-30 nucleobases in length targeted to a nucleic
PT acid molecule encoding human mdm-2 useful for modulating the expression
PT of human mdm-2 and reducing hyperproliferation of human cells.
XX
XX Example 9; Col 29; 77pp; English.
XX
XX The present invention relates to an antisense compound 8-30 nucleobases
CC in length targeted to nucleobases 1-308 of the 5' untranslated region,
CC 1776-1806 of the translation termination codon region or 1818-2370 of the
CC 3' untranslated region of a nucleic acid molecule encoding human mdm-2.
CC The invention is useful for reducing hyperproliferation of human cells,
CC modulating the expression of mdm2 in human cells or tissues or in vitro.
CC The hyperproliferative disorder includes cancer or psoriasis
XX
XX Sequence 20 BP; 4 A; 7 C; 2 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1346 CTGAGATGGAGATGATGAAG 1365
DB 20 CTCAGATGAAGATGATGAGG 1
RESULT 1306
AAF80833/C
ID AAF80833 standard; DNA; 20 BP.
XX
AC AAF80833;
XX
DT 02-MAY-2001 (first entry)
XX
DE Human mdm2 phosphorothioate oligonucleotide #207.
XX
KW Antisense; mdm2; hyperproliferation; cancer; psoriasis; ss.
XX
OS Homo sapiens.
XX
PN US6184212-B1.
XX
PD 06-FEB-2001.
XX
PF 26-MAR-1999; 99US-00280805.
XX
PR 26-MAR-1998; 98US-00048810.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Miraglia LJ, Nero P, Graham MJ, Monia BP, Cowsett LM;
XX
XX WPI; 2001-190948/19.
XX
PT Novel antisense compound 8-30 nucleobases in length targeted to a nucleic
PT acid molecule encoding human mdm-2 useful for modulating the expression
PT of human mdm-2 and reducing hyperproliferation of human cells.
XX
XX Example 9; Col 31; 77pp; English.
XX
XX The present invention relates to an antisense compound 8-30 nucleobases
CC in length targeted to nucleobases 1-308 of the 5' untranslated region,
CC 1776-1806 of the translation termination codon region or 1818-2370 of the
CC 3' untranslated region of a nucleic acid molecule encoding human mdm-2.
CC The invention is useful for reducing hyperproliferation of human cells,
CC modulating the expression of mdm2 in human cells or tissues or in vitro.
CC
```

```
CC The hyperproliferative disorder includes cancer or psoriasis
XX
XX Sequence 20 BP; 11 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 3462 TTATATATATCTATATATATAT 3481
DB 20 TTATATATTTCTAACTATAT 1
RESULT 1307
AAF62933/C
ID AAF62933 standard; DNA; 20 BP.
XX
AC AAF62933;
XX
DT 08-MAY-2001 (first entry)
XX
DE Human PEPCK-cytosolic antisense oligonucleotide ISIS 108107.
XX
XX Human; antiinflammatory; cytostatic; antisense gene therapy;
KW phosphoenol pyruvate carboxykinase-cytosolic; PEPCK-cytosolic; infection;
XX inflammation; tumour formation; phosphorothioate; ss.
XX
OS Homo sapiens.
XX
PN US6187545-B1.
XX
PD 13-FEB-2001.
XX
PF 21-JAN-2000; 2000US-00488671.
XX
PR 21-JAN-2000; 2000US-00488671.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI McKay R, Butler MM, Wyatt J, Cowsett LM;
XX
XX WPI; 2001-190979/19.
XX
PT Antisense compound capable of modulating the expression of phosphoenol
PT pyruvate carboxykinase-cytosolic, useful for preventing or delaying
PT infection, inflammation or tumor formation.
XX
XX Example 15; Col 43; 64pp; English.
XX
XX The present sequence is one of a number of antisense compounds of up to
CC 30 nucleobases in length that are capable of inhibiting the expression of
CC phosphoenol pyruvate carboxykinase-cytosolic (PEPCK-cytosolic). The
CC antisense compounds are useful for inhibiting the expression of PEPCK-
CC cytosolic in cells or tissues. They are commonly used as research
CC reagents and in diagnostics, e.g. to elucidate the function of particular
CC genes. They are also useful for distinguishing between functions of
CC various members of a biological pathway and for research use. The
CC antisense compounds are also useful prophylactically, e.g. to prevent or
CC delay infection, inflammation or tumour formation. The present sequence
CC is a chimeric phosphorothioate oligonucleotide with 2'-MOE wings and a
CC deoxy gap
XX
XX Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 2336 TGTGTGTGTGTGTGTGCACA 2355
DB 20 TGTGTGCATGTATGTGCACA 1
```

| | | | | |
|---|----|-------------|---------------|---|
| RESULT 1308 | XX | 21-NOV-2001 | (first entry) | Human mdm2 antisense oligonucleotide 31773. |
| AAF70496/c | DT | | | |
| ID AAF70496 standard; DNA; 20 BP. | DE | | | |
| XX | XX | | | |
| AC AAF70496; | XX | | | |
| 20-APR-2001 (first entry) | DT | | | |
| XX | XX | | | |
| Human DRD2 fragment 7 PCR primer SEQ ID NO:239. | DE | | | |
| XX | XX | | | |
| Human; dopamine receptor D2; DRD2; polymorphism; allele specific; | KW | | | |
| drug target isogene; detection; single nucleotide polymorphism; SNP; | KW | | | |
| genotype; schizophrenia; Parkinson's disease; myoclonus dystonia; MD; | KW | | | |
| probe; PCR primer; ss. | KW | | | |
| XX | XX | | | |
| Homo sapiens. | OS | | | |
| XX | XX | | | |
| WO200105832-A1. | PN | | | |
| XX | XX | | | |
| 25-JAN-2001. | PD | | | |
| 19-JUL-2000; 2000WO-US019644. | PF | | | |
| 19-JUL-1999; 99US-0144493P. | PR | | | |
| (GENA-) GENAISSANCE PHARM INC. | PA | | | |
| Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC; | PI | | | |
| WPI; 2001-091967/10. | XX | | | |
| DR | XX | | | |
| Polynucleotides comprising single nucleotide polymorphisms in the human | XX | | | |
| dopamine receptor D2, useful for detecting mutations associated with, | PT | | | |
| e.g. schizophrenia, Parkinson's and myoclonus dystonia. | PT | | | |
| XX | XX | | | |
| Example 1B; Page 40; 135pp; English. | PS | | | |
| XX | XX | | | |
| The present invention describes polynucleotides comprising single | CC | | | |
| nucleotide polymorphisms (SNPs) in the human dopamine receptor D2 (DRD2). | CC | | | |
| The polynucleotides may be used in assays to detect and characterise | CC | | | |
| polymorphisms in DRD2 that affect its expression and activity and are | CC | | | |
| involved in disorders such as schizophrenia, Parkinson's and myoclonus | CC | | | |
| dystonia (MD). This information would be useful for studying the | CC | | | |
| biological function of DRD2 as well as in identifying drugs targeting | CC | | | |
| this protein for the treatment of disorders related to its abnormal | CC | | | |
| expression or function. Polymorphisms in the DRD2 gene affect the | CC | | | |
| expression of active and functional polypeptides. Therefore it is | CC | | | |
| advantageous to detect polymorphisms in the DRD2 gene and how those | CC | | | |
| polymorphisms are combined in different copies of the gene. AAF70261 to | CC | | | |
| AAF70308 represent human DRD2 allele specific oligonucleotide probes, and | CC | | | |
| AAF70309 to AAF70404 represent human DRD2 allele specific oligonucleotide | CC | | | |
| primers which are used in the detection of DRD2 polymorphisms. AAF70405 | CC | | | |
| to AAF70452 represent oligonucleotide primers for the detection of human | CC | | | |
| DRD2 polymorphisms which are given in the exemplification of the present | CC | | | |
| invention. AAF70453 to AAF70538 represent PCR primers for the human DRD2 | CC | | | |
| gene which are used in examples from the present invention | CC | | | |
| XX | XX | | | |
| Sequence 20 BP; 10 A; 9 C; 0 G; 1 T; 0 U; 0 Other; | SQ | | | |
| Query Match 0.4%; Score 15.2; DB 1; Length 20; | | | | |
| Best Local Similarity 85.0%; Pred. No. 1.5e+03; | | | | |
| Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0; | | | | |
| QY 2319 GTGTGTGTGTGTGTGTGTGT 2338 | | | | |
| DB 20 GTGTTTGTGTGTGTGTGTGT 1 | | | | |
| RESULT 1309 | XX | | | |
| AAS29448/c | XX | | | |
| ID AAS29448 standard; DNA; 20 BP. | XX | | | |
| AC AAS29448; | AC | | | |

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1346 CTCGATGCGAGATGATGAAG 1365
 DB 20 CTCGATGAAGATGATGAGG 1

RESULT 1311
 AAD36546/c
 ID AAD36546 standard; DNA; 20 BP.
 XX
 AC AAD36546;
 XX
 DT 09-AUG-2002 (first entry)
 XX
 DE Human Her-1 antisense oligonucleotide ISIS #122155.
 XX
 KW Human; epidermal growth factor receptor; hyperproliferative disease;
 KW Her1; antisense; prophylaxis; psoriasis; phosphorothioate backbone;
 KW tumour; cancer; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX

Key Location/Qualifiers
 modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 modified_base 1..5
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 modified_base 1
 FT /tag= d
 FT /mod_base= m5c
 modified_base 2
 FT /tag= e
 FT /mod_base= m5c
 modified_base 5
 FT /tag= f
 FT /mod_base= m5c
 modified_base 6
 FT /tag= g
 FT /mod_base= m5c
 modified_base 7
 FT /tag= h
 FT /mod_base= m5c
 modified_base 13
 FT /tag= i
 FT /mod_base= m5c
 modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 modified_base 20
 FT /tag= j
 FT /mod_base= m5c

WO200226758-A1.
 04-APR-2002.
 28-SEP-2001; 2001WO-US030551.
 29-SEP-2000; 2000US-00676610.
 (ISIS-) ISIS PHARM INC.
 Bennett CP, Wyatt JR, Freier SM;

RESULT 1310
 AAS29386/c
 ID AAS29386 standard; DNA; 20 BP.
 XX
 AC AAS29386;
 XX
 DT 21-NOV-2001 (first entry)
 XX
 DE Human mdm2 antisense oligonucleotide 31442.
 XX
 KW Human; mdm2; hyperproliferative disorder; cancer; psoriasis;
 KW atherosclerosis; tumour; cytostatic; anti psoriatic;
 KW anti arteriosclerotic; vasotropic; antisense; phosphorothioate; ss.
 XX
 OS Homo sapiens.
 XX

Key Location/Qualifiers
 modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= All phosphorothioate linkages,
 additionally bases 1-6 and bases 15-20 are 2'-O-
 methoxyethyl bases, and bases 7-14 are deoxynucleotides"
 modified_base 1016575-A1.
 XX
 23-AUG-2001.
 XX
 02-JAN-2001; 2001US-00752983.
 XX
 26-MAR-1998; 98US-00048810.
 PR
 26-MAR-1999; 99US-00280805.
 PR
 (MIRA/) MIRAGLIA L J.
 PA (NERO/) NERO P.
 PA (GRAH/) GRAHAM M J.
 PA (MONI/) MONIA B P.
 PA (COWS/) COWSERT L M.
 XX
 Miraglia LJ, Nero P, Graham MJ, Monia BP, Cowsert LM;
 PI WPI; 2001-535565/59.
 DR
 An antisense compound, useful for treating e.g. cancer, comprises
 nucleobases targeted a region (e.g. translation termination codon region)
 of a nucleic acid encoding human mdm2.
 XX
 Example 9; Page 16; 81pp; English.
 PS
 The present invention relates to antisense compounds, 8-30 nucleobases in
 length targeted to the 5' untranslated region, translation termination
 codon region, 3' untranslated region, coding region or translation start
 site of a nucleic acid encoding human mdm2, where the antisense compound
 modulates the expression of human mdm2. The antisense oligonucleotides of
 the invention are useful for encoding human mdm2 and for inhibiting the
 expression of human mdm2. They may be used for treating an animal having
 a disease or condition associated with amplification of mdm2 gene or
 overexpression of mdm2 e.g. a hyperproliferative disorder such as cancer
 (blood, brain, breast, lung, or a soft tissue cancer) and psoriasis,
 fibrosis, atherosclerosis or restenosis, tumours, colorectal carcinoma
 and chronic myelogenous leukemia. The antisense compound may be
 administered with a chemotherapeutic agent to overcome drug resistance.
 CC The antisense compound reduces hyperproliferation of human cells. The
 method, which involves the use of the antisense compound, is also useful
 for detecting the role of mdm2 expression in various cell functions and
 CC physiological processes and useful in both clinical research and
 CC diagnostic tools. AAS29242-AAS29507 represent the human mdm2 antisense
 CC oligonucleotides of the present invention
 XX
 Sequence 20 BP; 4 A; 7 C; 2 G; 7 T; 0 U; 0 Other;

DR WPI; 2002-394234/42.

XX Novel antisense oligonucleotide that specifically hybridizes with and
PT inhibits nucleic acid encoding epidermal growth factor receptor, useful
PT for treating hyperproliferative disease such as cancer or psoriasis.

XX Claim 1; Page 45; 169pp; English.

XX The invention relates to an antisense oligonucleotide targetted to a
CC nucleic acid molecule encoding human epidermal growth factor receptor
CC (Her1) to inhibit its expression. The antisense compounds are useful for
CC treating diseases or conditions associated with Her-1 such as
CC hyperproliferative diseases especially cancer (lung, ovarian, colon or
CC prostate cancer) and psoriasis. They are also useful as research
CC reagents, diagnostics, therapeutics, kits and prophylactically e.g. to
CC prevent or delay tumour formation. The present sequence is an antisense
CC oligonucleotide targetted to human Her-1

XX Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1671 GATCGCAGATTCTGGCTGG 1690
||||| ||||| ||||| |||||
Db 20 GATCAGAGATTCTGGCTGG 1

RESULT 1312
AAD41768/c
ID AAD41768 standard; DNA; 20 BP.

XX AAD41768;

XX 30-OCT-2002 (first entry)

XX Human RECQL2 antisense oligonucleotide, ISIS #137549.

DE Antisense; RECQL2; Bloom's disorder; prophylaxis; infection; tumour;
KW inflammation; therapy; human; phosphorothioate; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20 /tag= a
FT /mod_base= OTHER
FT modified_base 1..5 /note= "Phosphorothioate backbone"
FT /tag= b
FT /mod_base= OTHER
FT modified_base 3..5 /note= "2'-methoxyethyl nucleotides"
FT /tag= d
FT /mod_base= m5c
FT modified_base 9 /tag= e
FT /mod_base= m5c
FT modified_base 12 /tag= f
FT /mod_base= m5c
FT modified_base 15 /tag= g
FT /mod_base= m5c
FT modified_base 16..20 /tag= c
FT /mod_base= OTHER
FT modified_base 18 /note= "2'-methoxyethyl nucleotides"
FT /tag= h
FT /mod_base= m5c

XX US6399378-B1.

XX 04-JUN-2002.

XX 01-MAR-2001; 2001US-00798096.

XX 01-MAR-2001; 2001US-00798096.

XX (ISIS-) ISIS PHARM INC.

XX Ward DT, Watt AT;

XX WPI; 2002-535979/57.

XX Antisense compounds targetted to nucleic acids encoding RECQL2 associated
PT with Bloom's disorder, for modulating expression and treating
PT diseases e.g. tumors associated with expression of the RECQL2 in humans.

XX Claim 3; Col 45; 86pp; English.

XX The invention relates to antisense compounds targetted to nucleic acid
CC encoding RECQL2 (gene associated with Bloom's disorder) to inhibit the
CC expression of RECQL2. Antisense compounds of the invention are useful for
CC treating diseases associated with expression of RECQL2, in humans. They
CC are useful for diagnostics, therapeutics and as research reagent, e.g.
CC prophylactically to prevent or delay infection, inflammation or tumour
CC formation. They are also useful in antisense therapy. The present
CC sequence is an antisense oligonucleotide targetted to human RECQL2 DNA

XX Sequence 20 BP; 5 A; 7 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1357 ATGATGAAGATGATCGGAA 1376
||||| ||||| ||||| |||||
Db 20 ATGATGATGATGATCGGAA 1

RESULT 1313
ABK68247
ID ABK68247 standard; DNA; 20 BP.

XX ABK68247;

XX 02-JUL-2002 (first entry)

XX Mouse HYPLIP1 locus specific primer aa049675r1.

XX Mouse; primer; antilipaeic; cardiant; hypotensive; anorectic; HYPLIP1;
KW FCHL1; lipid disorder; familial combined hyperlipidaemia;
KW coronary artery disease; atherogenic lipoprotein phenotype; cancer;
KW hyperapobetalipoproteinaemia; hypertriglyceridaemia; obesity; ss;
KW familial dyslipidaemic hypertension; syndrome X; insulin resistance;
KW hypercholesterolaemia; chromosome 3.

XX Mus sp.

XX WO200220847-A2.

XX 14-MAR-2002.

XX 07-SEP-2001; 2001WO-US028181.

XX 08-SEP-2000; 2000US-0231322P.

XX (REGC) UNIV CALIFORNIA.

XX Bodnar JS, Castellani LM, Chatterjee A, De Jong P, Lusis AJ;
PI Ohmen J, Ross D, Tafuri S, Wu C;

XX

DR WPI; 2002-339808/37.
 XX Novel HYPLIPI and FCHLI genes and their sequence variations associated
 PT with lipid disorder and cancer, useful for prognosis, diagnosis and
 PT treatment of lipid disorders.
 XX Claim 11; Page 75; 102pp; English.
 XX This invention relates to the cDNA and protein sequences of novel
 CC proteins HYPLIPI or FCHLI and to sequence variations within these genes
 CC that have been shown to be associated with lipid disorders.
 CC Oligonucleotide probes that hybridise to the cDNA sequence are useful for
 CC analysing the expression of FCHLI by detecting the expression of the mRNA
 CC transcript in the sample. A host cell transformed with the cDNA of the
 CC invention is useful for producing the protein by recombinant means.
 CC Pharmaceutical compositions based on the sequences of the invention are
 CC useful for treating or preventing a lipid disorder associated with
 CC expression of FCHLI such as familial combined hyperlipidaemia, coronary
 CC artery disease, atherogenic lipoprotein phenotype,
 CC hyperapobetalipoproteinaemia, hypertriglyceridaemia, familial
 CC dyslipidaemic hypertension, syndrome X, obesity, insulin resistance and
 CC hypercholesterolaemia. The cDNA sequence is useful in the diagnosis or
 CC prognosis of predisposition to lipid disorders and cancers, and also to
 CC identify a molecule which enhances or decreases the HYPLIPI or FCHLI
 CC activity. The present sequence represents an oligonucleotide primer
 CC specific for the mouse HYPLIPI locus of the invention. The mouse HYPLIPI
 CC locus is situated on chromosome 3
 XX Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 3651 CTTGCTTGCTGCAGGCCA 3670
 Db 1 CTTGCATGCTGCAGGTCCA 20
 RESULT 1314
 ABN99692/C
 ID ABN99692 standard; DNA; 20 BP.
 AC ABN99692;
 XX
 DT 16-AUG-2002 (first entry)
 XX
 DE Human clusterin inhibiting antisense oligonucleotide 26.
 XX Human; antisense inhibition; antisense oligonucleotide; clusterin;
 KW hypercholesterolaemia; cardiovascular disorder; ss;
 KW hyperproliferative disorder; hyperlipidemic disorder;
 KW phosphorothioate backbone; 2'-O-methoxyethyl wing.
 XX Homo sapiens.
 OS WO200222635-A1.
 PN 21-MAR-2002.
 PD 10-SEP-2001; 2001WO-US028235.
 PF 11-SEP-2000; 2000US-00659791.
 PR (ISIS-) ISIS PHARM INC.
 PA Monia BP, Freier SM;
 XX WPI; 2002-404805/43.
 XX Novel antisense compound targeted to nucleic acid molecule encoding
 PT clusterin, useful for treating animal having disease associated with
 PT clusterin such as hyperlipidemic disorder, cardiovascular disorder.

XX Claim 3; Page 83; 125pp; English.
 XX The invention comprises antisense oligonucleotides that are capable of
 CC inhibiting expression of the human clusterin gene. The antisense
 CC oligonucleotides of the invention are useful for inhibiting the
 CC expression of clusterin in cells. The antisense oligonucleotides are also
 CC useful for treating an animal with a disease or condition associated with
 CC clusterin (e.g. hypercholesterolaemia; cardiovascular disorders;
 CC hyperproliferative disorders; and hyperlipidemic disorders). The present
 CC DNA sequence represents a clusterin antisense oligonucleotide of the
 CC invention. NOTE: The present DNA sequence has a phosphorothioate backbone
 CC and also contains 2'-O-methoxyethyl wings
 XX Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 489 GCAGACGTACGCTGGACG 508
 Db 20 GCAGACGCACATGCTGGATG 1
 RESULT 1315
 ABK85323
 ID ABK85323 standard; DNA; 20 BP.
 XX ABK85323;
 AC ABK85323;
 XX
 DT 13-AUG-2002 (first entry)
 XX
 DE Human PTP1B antisense oligonucleotide ISIS 142074.
 XX Antisense; protein phosphatase 1B; PTP1B; ss; probe; human;
 KW type 2 diabetes; obesity; ovarian cancer; chronic myeloid leukaemia;
 KW hyperproliferative disease; antidiabetic; anorectic; cytostatic;
 KW blood glucose; gene therapy.
 XX Homo sapiens.
 OS US2002055479-A1.
 PN 09-MAY-2002.
 PD 14-MAY-2001; 2001US-00854883.
 PF 18-JAN-2000; 2000US-00487368.
 PR 31-JUL-2000; 2000US-00629644.
 XX (COMS/) COMSERT L M.
 PA (WYAT/) WYATT J.
 PA (FREI/) FREIER S M.
 PA (MONI/) MONIA B P.
 PA (BUTL/) BUTLER M M.
 PA (MCKA/) MCKAY R.
 XX Cowser LM, Wyatt J, Freier SM, Monia BP, Butler MM, Mckay R;
 XX WPI; 2002-462914/49.
 DR Compound for inhibiting the expression of protein phosphatase 1B (PTP1B)
 PT and for treating diabetes, cancer, or obesity, comprises an antisense
 PT oligonucleotide targeted to nucleic acid encoding PTP1B.
 XX Example 22; Page 28; 133pp; English.
 XX The invention relates to a compound of 8-50 nucleobases in length
 CC targeted to a nucleic acid encoding protein phosphatase 1B (PTP1B), where
 CC the compound specifically hybridises with and inhibits the expression of
 CC PTP1B (e.g. an antisense oligonucleotide). Also included are (1) a
 CC compound of 8-50 nucleobases in length which specifically hybridises with

an 8 nucleobase portion of an active site on a nucleic acid encoding
 PTP1B; (2) inhibiting the expression of PTP1B in cells or tissues
 comprising contacting the cells or tissues with the compound; treating an
 animal having or suspected of having a disease or condition associated
 with PTP1B comprising administering the compound; (4) decreasing blood
 sugar levels in an animal comprising administering the compound; (5)
 preventing or delaying the onset of a disease or condition associated
 with PTP1B in an animal comprising administering the compound; and (6)
 preventing or delaying the onset of an increase in blood glucose levels
 in an animal comprising administering the compound. The compound is used
 to inhibit the expression of PTP1B in cells or tissues, to treat or
 prevent or delay the onset of a disease or condition associated with
 PTP1B, such as type 2 diabetes, obesity, cancer (especially ovarian
 cancer, chronic myeloid leukaemia and hyperproliferative diseases in an
 animal having or suspected of having the disease or condition, and for
 decreasing blood sugar levels or preventing or delaying the onset of an
 increase in blood glucose levels in an animal. The compound is also used
 in diagnostics, therapeutics, prophylaxis, and in research reagents and
 kits. The present sequence is an antisense compound of the invention
 targeting human PTP1B

XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 416 TCATGAAGCGTGGTGCC 435
 DB 1 TCATGAAGCGTGGTGCC 20

RESULT 1316
 AAH77295
 ID AAH77295 standard; DNA; 20 BP.
 AC AAH77295;
 XX
 XX
 XX 21-FEB-2002 (first entry)
 XX
 XX RT-PCR primer 1 for amplification of sAC cDNA.
 XX Rat; soluble adenylyl cyclase; rat sAC; AC; signal transduction pathway;
 KW cyclic AMP; cAMP; stimulant; inhibitory; cell growth; cell proliferation;
 KW cancer; infertility; diabetes; pathological condition; ophthalmological;
 KW blood gas monitoring; cytostatic; antidiabetic; antiinfertility;
 KW RT-PCR primer; ss.
 XX Rattus sp.
 OS
 XX WO200185753-A1.
 PN
 XX 15-NOV-2001.
 PD
 XX 27-OCT-2000; 2000WO-US029872.
 PF
 XX 11-MAY-2000; 2000US-00568407.
 PR
 XX (CORR) CORNELL RES FOUND INC.
 PA
 XX Buck J, Levin LR;
 PI
 XX WPI; 2002-041584/05.
 DR
 XX New isolated nucleic acid molecule encoding a soluble adenylyl cyclase
 PT for qualitatively or quantitatively diagnosing conditions arising from
 PT soluble adenylyl cyclase activation.
 PT
 XX Example 1; Page 53; 108pp; English.
 PS
 XX This polynucleotide sequence represents the RT-PCR primer 1 for
 CC amplification of soluble adenylyl cyclase (sAC) cDNA. The invention
 CC relates to isolated nucleic acid molecules encoding soluble adenylyl

cyclase (sAC) proteins. Adenylyl cyclase (AC) is the effector molecule of
 one of the most widely used signal transduction pathways. Its product,
 cyclic AMP (cAMP), is a nearly universally utilised second messenger
 molecule, which mediates cellular responses to nutritional conditions and
 extracellular signals in organisms from prokaryotes to higher eukaryotes.
 cAMP has long been known to exert both stimulatory and inhibitory effects
 on cell growth and proliferation. The invention is used to detect an
 increase or decrease in the level of sAC in a biological sample from a
 mammal suspected of suffering such a condition is used for diagnosing the
 likelihood or onset of, or for monitoring the course and severity of a
 pathological condition (such as cancer, infertility or diabetes)
 associated with sAC activation, or deficiency of sAC activation. The
 isolated polynucleotides of the invention are useful for diagnosing a
 pathological condition, for monitoring blood gases, for qualitatively or
 quantitatively diagnosing conditions arising from sAC activation, to
 detect sAC specific cell lines and to detect sAC positive cells in a
 patient, in particular a human patient. The advantage of this invention
 is a new method of screening for a modulator of sAC-induced signalling
 permits rapid evaluation of a cellular response, and short-circuits
 tedious and time consuming biological assays by detecting individual
 signals in sAC-induced signal transduction pathway. Signal transduction
 assays can be performed with very small amount of material. The
 CC polynucleotides and proteins of the invention have cytostatic,
 CC antidiabetic, ophthalmological and antiinfertility activities
 XX

XX Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1998 CAAGCAGCTGGTGAGGACC 2017
 DB 1 CGAGCAGCTGGTGAGATCC 20

RESULT 1317
 AAD35760/c
 ID AAD35760 standard; DNA; 20 BP.
 XX
 XX AAD35760;
 AC
 XX 26-JUL-2002 (first entry)
 DT Human hIbeta4BP antisense oligonucleotide, ISIS #129486.
 XX Antisense; human Integrin beta 4 binding protein; hIbeta4BP; cytostatic;
 DE cell proliferation; cancer; gene therapy; phosphorothioate backbone; ss.
 XX Homo sapiens.
 OS
 XX
 XX Key Location/Qualifiers
 PH modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 FT modified_base 1..5
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 FT modified_base 2
 FT /tag= d
 FT /mod_base= m5c
 FT modified_base 12
 FT /tag= e
 FT /mod_base= m5c
 FT modified_base 13
 FT /tag= f
 FT /mod_base= m5c
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'methoxyethyl nucleotides"
 FT

```

PT modified_base 17 /*tag= g
FT /mod_base= m5c
PT modified_base 18 /*tag= h
FT /mod_base= m5c
PT modified_base 20 /*tag= i
FT /mod_base= m5c
XX
XX US6355482-B1.
PN
XX
PD 12-MAR-2002.
XX
XX PF 17-NOV-2000; 2000US-00716161.
XX
XX PR 17-NOV-2000; 2000US-00716161.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Bennett CF, Freier SM;
XX
XX DR WPI; 2002-370579/40.
XX
XX PT New antisense compound targeted to a region of a nucleic acid encoding
PT human integrin beta 4 binding protein and that inhibits expression of the
PT nucleic acid, for treating e.g. cancer.
XX
XX PS Claim 3; Col 45-46; 40pp; English.
XX
XX CC The invention relates to antisense compounds targetted to a nucleic acid
CC encoding human integrin beta 4 binding protein (hibeta4BP), which
CC specifically hybridises with the nucleic acid and inhibits its
CC expression. The antisense compounds are useful to prevent or treat
CC diseases associated with hibeta4BP expression, particularly conditions
CC involving aberrant or deregulated cell proliferation (e.g. cancer). The
CC hibeta4BP polynucleotide is used in gene therapy. The present sequence is
CC an antisense oligonucleotide targetted to hibeta4BP
XX
XX SQ Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2093 GTGGCCAGGACACCCCGCAGC 2112
DB ||||| ||||| ||||| |||||
20 GTGGCCTGGACACACCGC 1

RESULT 1318
AAD39345/C
ID AAD39345 standard; DNA; 20 BP.
XX
XX AC AAD39345;
XX
XX 04-OCT-2002 (first entry)
XX
XX DE Human Von Willebrand factor-cleaving protease cloning PCR primer, 6561.
XX
XX KW Human; Von Willebrand factor-cleaving protease; vWF-cp; therapy; enzyme;
XX transgenic animal; immunisation; thromboembolic disease; preeclampsia;
XX thrombotic thrombocytic purpura; TTP; Henoch-Schonlein purpura;
XX thrombosis; neonatal thrombocytopenia; haemolytic-uraemic syndrome;
XX transgenic; anticoagulant; RT-PCR; primer; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200242441-A2.
XX
XX 30-MAY-2002.
PD
XX
XX PF 20-NOV-2001; 2001WO-EP013391.

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XX
XX PR 22-NOV-2000; 2000US-00721254.
XX
XX PR 12-APR-2001; 2001US-00833328.
XX
XX PA (BAXT ) BAXTER AG.
XX
XX PI Laemmle B, Gerritsen HE, Furlan M, Turecek P, Schwarz H;
XX Scheiflinger F, Antoine G, Kerschbaumer R, Tegliavacca L;
XX Zimmermann K, Voelkel D;
XX
XX DR WPI; 2002-479950/51.
XX
XX PT Novel isolated or substantially purified Von Willebrand factor-cleaving
XX PT protease, useful for producing preparation for therapy of thrombosis and
XX PT thromboembolic disease such as thrombotic thrombocytic purpura.
XX
XX PS Example 3; Page 34; 93pp; English.
XX
XX CC The invention relates to an isolated or substantially pure Von Willebrand
XX CC factor-cleaving protease (vWF-cp) polypeptide. vWF-cp is useful for
XX CC purifying vWF which involves providing vWF-cp as a ligand, contacting a
XX CC solution comprising vWF with the polypeptide ligand under conditions
XX CC where vWF is bound to the ligand and recovering from the ligand purified
XX CC vWF. vWF-cp is useful for producing anti-vWF cp polypeptide antibodies
XX CC which involves immunising an animal with vWF-cp and isolating the anti-
XX CC vWF cp polypeptide antibodies from the animal. vWF-cp is useful for
XX CC producing a preparation of prophylaxis and therapy of thrombosis and
XX CC thromboembolic disease such as thrombotic thrombocytic purpura (TTP),
XX CC Henoch-Schonlein purpura, preeclampsia, neonatal thrombocytopenia or
XX CC haemolytic-uraemic syndrome. vWF-cp can also be used for processing
XX CC plasmatric or recombinantly produced vWF. The invention is useful for
XX CC construction expression systems and generating transgenic animals which
XX CC express the polypeptide in vivo. The present sequence is human vWF-cp
XX CC gene cloning RT-PCR primer
XX
XX SQ Sequence 20 BP; 3 A; 11 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 182 ACGGGGAGGACGAGCTGAG 201
DB | ||||| ||||| ||||| |||||
20 ATGGGGAGGACGATGGTGAG 1

RESULT 1319
ABK71151
ID ABK71151 standard; DNA; 20 BP.
XX
XX AC ABK71151;
XX
XX 15-JUL-2002 (first entry)
XX
XX DE Mouse HYPLIP1 locus PCR primer #224.
XX
XX KW Human; mouse; HYPLIP1; FCHLI; familial combined hyperlipidaemia; cancer;
XX lipid disorder; PCR; primer; ss.
XX
XX OS Mus sp.
XX
XX PN WO200220848-A2.
XX
XX PD 14-MAR-2002.
XX
XX PF 07-SEP-2001; 2001WO-US028182.
XX
XX PR 08-SEP-2000; 2000US-0231322P.
XX
XX PA (REGC ) UNIV CALIFORNIA.
XX
XX PI Bodnar JS, Castellani LW, Chatterjee A, De Jong P, Luis AJ;
XX Ohmen J, Ross D, Tafari S, Wu C;

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XX WPI; 2002-329882/36.
 XX New mouse HYPLIP1 and human FCHL1 (familial combined hyperlipidemia)
 PT genes and their sequence variations, useful for diagnosing, treating or
 PT preventing lipid disorders and cancers.
 XX
 PS Claim 11; Page 75; 102pp; English.
 XX
 CC The invention relates to an isolated polynucleotide comprising a sequence
 CC variation of a mouse HYPLIP1 cDNA or a human FCHL1 (familial combined
 CC hyperlipidaemia) gene. The FCHL1 polynucleotide, the FCHL1 polypeptide or
 CC antibody immunoreactive to the FCHL1 polypeptide are useful for treating
 CC or preventing cancer associated with expression of FCHL1, as well as for
 CC treating lipid disorder. The mouse HYPLIP1 cDNA or human FCHL1 gene are
 CC also useful for diagnosing or prognosing a predisposition to lipid
 CC disorder and cancer. ABK70902-ABK71303 represent mouse HYPLIP1, human
 CC FCHL1 coding sequences and PCR primers of the invention
 XX
 SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3651 CTTGCTTGCTGCAGGCCA 3670
 Db 1 CTTGCTGCCTGCAGTCTGA 20
 RESULT 1320
 ABT08003/C
 ID ABT08003 standard; DNA; 20 BP.
 XX
 AC ABT08003;
 XX
 DT 21-NOV-2002 (first entry)
 DE Synthetic oligonucleotide designated RM92 SEQ ID No 15.
 XX
 KW Entomopoxvirus spheroidin gene; EVV; active promoter; thymidine kinase;
 KW virus vector system; vaccinia; swine pox virus vector; ds.
 XX
 OS Unidentified.
 XX
 PN US6410221-B1.
 XX
 PD 25-JUN-2002.
 XX
 PF 09-AUG-1999; 99US-00370861.
 XX
 PR 19-FEB-1991; 91US-00657584.
 PR 30-JAN-1992; 92US-00827685.
 PR 12-FEB-1992; 92WO-US000855.
 PR 07-DEC-1992; 92US-00991867.
 PR 22-NOV-1993; 93US-00107755.
 PR 17-OCT-1995; 95US-00544332.
 XX
 PA (UYFL) UNIV FLORIDA RES FOUND INC.
 XX
 PI Moyer RW, Hall RL, Gruidl ME, Li Y;
 XX
 DR WPI; 2002-625950/67.
 XX
 PT New Entomopoxvirus spheroidin gene sequences isolated from infected
 PT Anascta moorei are useful in expression cassettes to regulate expression
 PT of heterologous DNA in virus vector systems.
 XX
 PS Example 6; Col 27; 88pp; English.
 XX
 CC The invention relates to a novel isolated Entomopoxvirus (EPV)
 CC spheroidin gene polynucleotide which is either an active promoter or an
 CC active promoter plus a coding sequence, and is able to direct expression

CC of an operably linked heterologous gene in a host cell. The regulatory
 CC sequences of the EPV spheroidin and thymidine kinase genes are useful in
 CC expression cassettes to regulate expression of heterologous DNA in virus
 CC vector systems, for example in vaccinia and swine pox virus vectors. This
 CC polynucleotide sequence represents a nucleic acid relating to the novel
 CC isolated Entomopoxvirus (EPV) spheroidin gene of the invention
 XX
 SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3715 GAGGTGTCTACCCAAACCGGC 3734
 Db 20 GAGGTGTCTACCCAAACCGGC 1
 RESULT 1321
 ABL95904
 ID ABL95904 standard; DNA; 20 BP.
 XX
 AC ABL95904;
 XX
 DT 19-JUN-2002 (first entry)
 DE Probe poly m for assaying nucleic acids.
 XX
 DE Probe; polymorphism detection; mutation detection; disease diagnosis;
 KW microbial identification; ss.
 KW
 OS Unidentified.
 XX
 PN WO200208414-A1.
 XX
 PD 31-JAN-2002.
 XX
 PF 27-JUN-2001; 2001WO-IB001147.
 XX
 PR 27-JUN-2000; 2000JP-00191333.
 PR 03-AUG-2000; 2000JP-00236115.
 PR 26-SEP-2000; 2000JP-00292483.
 XX
 PA (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
 PA (KANK-) KANKYO ENG CO LTD.
 XX
 PI Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;
 PI Yokomaku T;
 XX
 DR WPI; 2002-195876/25.
 XX
 PT Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
 PT their polymorphism and mutation, particularly useful in science and
 PT medicine for e.g. analytical applications, disease diagnosis and
 PT microbial identification.
 XX
 PS Example 13; Page 62; 152pp; Japanese.
 XX
 CC The present invention relates to nucleic acid probes, which are useful
 CC for assaying nucleic acids by hybridising with a target nucleic acid, in
 CC which a single-stranded oligonucleotide is labelled with a fluorescent
 CC substance and a quencher in a manner that the fluorescence intensity of
 CC the hybridisation reaction system is increased after completion of the
 CC hybridisation but no stem loop structure is formed. The probes are useful
 CC for assaying nucleic acids and their polymorphism and mutation.
 CC particularly useful for e.g. analytical applications, disease diagnosis,
 CC and microbial identification. The present sequence was used to illustrate
 CC the invention
 XX
 SQ Sequence 20 BP; 5 A; 0 C; 3 G; 12 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;

```

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 3473 TATATATATAATTATTGAG 3492
Db 1 TATATATATATTTTGGG 20

RESULT 1322
ABL94430/C
ID ABL94430 standard; DNA; 20 BP.
AC ABL94430;
XX
XX
XX
XX 29-JUL-2002 (first entry)
XX
XX Mouse C/EBP beta phosphorothioate antisense oligonucleotide, SEQ ID:197.
XX
XX Mouse; murine; C/EBP beta; CCAAT/enhancer-binding protein beta; C/EBP2;
XX LAP; TCF5; CRP2; NFIL6; IL6BP; NF-M; AGP/EBP; Apc/EBP;
XX transcription factor; tissue development; cellular function;
XX proliferation; differentiation; hormone responsiveness;
XX oxidative stress response; IL-6 signalling mediator; interleukin-6;
XX carbohydrate metabolism; immunity; Th1 response; female fertility;
XX gluconeogenesis; ovarian; cancer; tumour formation; type II diabetes;
XX infection; inflammation; expression inhibition; phosphorothioate;
XX antisense oligonucleotide; ss.
XX
XX Mus musculus.
XX
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /*note= "Phosphorothioate linkages"
XX modified_base 1..5
XX /*tag= b
XX /mod_base= OTHER
XX /*note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
XX cytosines are 5-methylcytosine"
XX modified_base 16..20
XX /*tag= c
XX /mod_base= OTHER
XX /*note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
XX cytosines are 5-methylcytosine"
XX
XX US6271030-B1.
XX
XX
XX 07-AUG-2001.
XX
XX 14-JUN-2000; 2000US-00593711.
XX
XX 14-JUN-2000; 2000US-00593711.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Butler MM, Wyatt J;
XX
XX WPI; 2002-214451/27.
XX
XX Novel antisense compound targeted to nucleic acids encoding human or
XX mouse CCAAT/enhancer binding protein (C/EBP) beta, useful in vitro for
XX inhibiting expression of human or mouse C/EBP beta in cells/tissues.
XX
XX Example 17; Col 51-52; 69pp; English.
XX
XX Sequences ABL94252-ABL94476 represent antisense oligonucleotides targeted
XX to the human or mouse CCAAT/enhancer-binding protein alpha (C/EBP alpha)
XX gene, which inhibit its expression. The antisense oligonucleotides were
XX designed to target different regions of the human and/or mouse C/EBP
XX alpha RNA, and were analysed for their effect on C/EBP alpha mRNA levels
XX by quantitative real-time PCR. The C/EBP family of proteins are a family
XX of transcription factors which regulate the expression of a wide range of
XX genes that control normal tissue development, cellular function, cellular

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CC proliferation and functional differentiation. C/EBP beta (also known as
CC C/EBP2, LAP, TCF5, CRP2, NFIL6, IL6BP, NF-M, AGP/EBP and Apc/EBP)
CC primarily regulates hormone responsiveness and oxidative stress responses
CC and is a mediator of IL-6 (interleukin-6) signalling. C/EBP beta is
CC thought to be involved in carbohydrate metabolism, immunity, the Th1
CC response, female fertility and gluconeogenic pathways. C/EBP beta is
CC expressed in the liver, lung, spleen, kidney, brain, and testis, with the
CC highest expression found in the lung. It is also expressed at a higher
CC level in malignant ovarian tissue compared with normal ovarian tissue,
CC and its expression in pancreas is upregulated in response to chronically
CC elevated levels of glucose, indicating that it is involved in the
CC impairment of insulin secretion in type II diabetes. The oligonucleotides
CC of the invention are useful for diagnosis, prevention and treatment of
CC conditions associated with C/EBP beta expression, such as cancer
CC (particularly ovarian cancer), tumour formation, diabetes (particularly
CC type II diabetes), infection, or inflammation
XX
XX SQ Sequence 20 BP; 1 A; 9 C; 9 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1478 GGGCGCGGGCGGCCCGGGC 1497
XX ||||| ||||| ||||| |||||
XX Db 20 GGGCGCGGGCGGCCCGGGC 1
XX
XX RESULT 1323
XX ABL93998/C
XX ID ABL93998 standard; DNA; 20 BP.
XX
XX AC ABL93998;
XX
XX DT 16-FEB-2002 (first entry)
XX
XX DE Capture oligonucleotide Zip ID#1085 oligo #9.
XX
XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
XX ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
XX infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
XX oncogene; tumour suppressor; human papillomavirus; forensic;
XX environmental monitoring; food industry; feed industry; ss.
XX
XX OS Synthetic.
XX
XX PN WO200179548-A2.
XX
XX PD 25-OCT-2001.
XX
XX PF 04-APR-2001; 2001WO-US010958.
XX
XX PR 14-APR-2000; 2000US-0197271P.
XX
XX PA (CORR ) CORNELL RES FOUND INC.
XX
XX PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
XX WPI; 2002-034366/04.
XX
XX Designing capture oligonucleotide probes for use on a support to which
XX complementary oligonucleotides hybridize with little mismatch.
XX
XX Example 5; Fig 29; 300pp; English.
XX
XX The present invention describes a method (M1) for designing capture
XX oligonucleotide probes (I) for use on a support to which complementary
XX oligonucleotide probes (II) will hybridize with little mismatch, where
XX (I) have melting temperatures within a narrow range. The method is useful
XX for detecting infectious diseases caused by bacterial infectious agents
XX e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
XX infectious agents e.g. Cryptococcus neoformans, Candida albicans and
XX Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,

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PI Bennett CF, Watt AT;
 XX WPI; 2003-301004/29.
 XX
 XX
 XX New antisense oligonucleotide targeted to a nucleic acid encoding
 PT vascular endothelial growth factor receptor-1, useful for diagnosing or
 PT treating cancer, rheumatoid arthritis, or diseases or conditions
 PT involving angiogenesis.
 XX
 XX
 XX Claim 3; Page 83; 150pp; English.
 XX
 XX The present invention describes a compound (C) 8-50 nucleobases in length
 CC targeted to a nucleic acid molecule encoding vascular endothelial growth
 CC factor receptor-1 (VEGFR-1), where the compound inhibits the expression
 CC of VEGFR-1 and specifically hybridises with the nucleic acid encoding
 CC VEGFR-1 or with an 8-nucleobase portion of an active site on the nucleic
 CC acid molecule encoding VEGFR-1. Also described: (1) a composition
 CC comprising (C) and a carrier or diluent; (2) inhibiting the expression of
 CC VEGFR-1 in cells or tissues by contacting the cells or tissues with (C)
 CC so that the expression of VEGFR-1 is inhibited; and (3) treating an
 CC animal having a disease or condition associated with VEGFR-1 by
 CC administering (C) to the animal so that the expression of VEGFR-1 is
 CC inhibited. (C) has antiangiogenic, antirheumatic, antiarthritic,
 CC cytostatic and antiinflammatory activities, and can be used in antisense
 CC gene therapy. The antisense compounds are useful for modulating the
 CC expression of VEGFR-1 and for treating diseases or conditions associated
 CC with the expression of VEGFR-1, such as hyperproliferative disorders
 CC (e.g. cancer), rheumatoid arthritis, or diseases or conditions involving
 CC angiogenesis. The antisense compounds are also useful for diagnostics,
 CC therapeutics, prophylaxis, e.g. to prevent or delay infection,
 CC inflammation or tumour formation, as research reagents and kits, and in
 CC distinguishing between functions of various members of a biological
 CC pathway. The present sequence represents a human VEGFR-2 chimeric
 CC phosphorothioate antisense oligonucleotide, which is used in an example
 CC from the present invention
 XX
 XX Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1610 AGTGCATCCACAGGGACCTG 1629
 Db 20 AGTGCATTCATCGGACCTG 1
 RESULT 1331
 ACC86777/C
 ID ACC86777 standard; DNA; 20 BP.
 XX
 AC ACC86777;
 XX
 DT 04-AUG-2003 (first entry)
 XX
 XX Human VEGFR-1 chimeric phosphorothioate oligonucleotide SEQ ID NO:72.
 DE
 XX Vascular endothelial growth factor receptor 1; VEGF receptor; VEGFR;
 KW inhibitor; cytostatic; antirheumatic; antiarthritic; antiangiogenic;
 KW antiinflammatory; antisense gene therapy; hyperproliferative disorder;
 KW cancer; rheumatoid arthritis; angiogenesis; infection; inflammation;
 KW tumour formation; phosphorothioate; 2'-O-methoxyethyl; 2'-MOE; ss.
 XX
 XX Homo sapiens.
 OS
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "This oligonucleotide has a phosphorothioate
 FT backbone and 2'-O-methoxyethyl (2'-MOE) wings at the 5',
 FT and 3' ends, which are 5 nucleotides in length. Also all

FT cytidine residues are 5-methylcytidines"
 XX
 PN W02003022227-A2.
 XX
 XX 20-MAR-2003.
 PD
 XX 12-SEP-2002; 2002WO-US029148.
 PF
 XX 13-SEP-2001; 2001US-00953318.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Bennett CF, Watt AT;
 XX WPI; 2003-301004/29.
 XX
 XX New antisense oligonucleotide targeted to a nucleic acid encoding
 PT vascular endothelial growth factor receptor-1, useful for diagnosing or
 PT treating cancer, rheumatoid arthritis, or diseases or conditions
 PT involving angiogenesis.
 XX
 XX Claim 3; Page 83; 150pp; English.
 PS
 XX The present invention describes a compound (C) 8-50 nucleobases in length
 CC targeted to a nucleic acid molecule encoding vascular endothelial growth
 CC factor receptor-1 (VEGFR-1), where the compound inhibits the expression
 CC of VEGFR-1 and specifically hybridises with the nucleic acid encoding
 CC VEGFR-1 or with an 8-nucleobase portion of an active site on the nucleic
 CC acid molecule encoding VEGFR-1. Also described: (1) a composition
 CC comprising (C) and a carrier or diluent; (2) inhibiting the expression of
 CC VEGFR-1 in cells or tissues by contacting the cells or tissues with (C)
 CC so that the expression of VEGFR-1 is inhibited; and (3) treating an
 CC animal having a disease or condition associated with VEGFR-1 by
 CC administering (C) to the animal so that the expression of VEGFR-1 is
 CC inhibited. (C) has antiangiogenic, antirheumatic, antiarthritic,
 CC cytostatic and antiinflammatory activities, and can be used in antisense
 CC gene therapy. The antisense compounds are useful for modulating the
 CC expression of VEGFR-1 and for treating diseases or conditions associated
 CC with the expression of VEGFR-1, such as hyperproliferative disorders
 CC (e.g. cancer), rheumatoid arthritis, or diseases or conditions involving
 CC angiogenesis. The antisense compounds are also useful for diagnostics,
 CC therapeutics, prophylaxis, e.g. to prevent or delay infection,
 CC inflammation or tumour formation, as research reagents and kits, and in
 CC distinguishing between functions of various members of a biological
 CC pathway. The present sequence represents a human VEGFR-2 chimeric
 CC phosphorothioate antisense oligonucleotide, which is used in an example
 CC from the present invention
 XX
 XX Sequence 20 BP; 2 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1573 CAGGTGCGCCGGGGCATGCA 1592
 Db 20 CAAGTGGCCAGAGGCATGCA 1
 RESULT 1332
 ACC59763
 ID ACC59763 standard; DNA; 20 BP.
 XX
 AC ACC59763;
 XX
 XX 08-SEP-2003 (first entry)
 DT
 XX Neomycin resistance gene oligonucleotide #2.
 DE
 XX Recombinant protein production; vector; host cell line; erythropoietin;
 KW EPO; human; selection agent; selectable marker; PCR; primer; ss.
 XX
 XX Unidentified.
 OS

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XX WO2003046187-A1.
XX
XX
XX PD 05-JUN-2003.
XX
XX PF 26-NOV-2002; 2002WO-EP013297.
XX
XX PR 28-NOV-2001; 2001US-0333868P.
XX
XX PA (BIOC ) BIOCHEMIE GMBH.
XX
XX PI Schoergendorfer K, Windisch J, Kunert R, Unterluggauer F;
XX
XX WPI; 2003-505205/47.
XX
XX PT Producing a transformed eukaryotic host cell (e.g. Chinese hamster ovary
XX cell) that expresses a recombinant polypeptide (e.g. erythropoietin)
XX comprises introducing into the host cell a first and a second
XX polynucleotide vector.
XX
XX PS Example 1; Page 22; 62pp; English.
XX
XX CC The present invention relates to a method of producing a transformed
XX eukaryotic host cell that expresses a recombinant polypeptide of interest
XX comprising introducing into a eukaryotic host cell first and second
XX polynucleotide vectors that are integrated into the genome of the host
XX cell. Particular polypeptides of interest include human erythropoietin
XX (EPO). The method is useful in producing host cells that express
XX recombinant polypeptides, such as human erythropoietin, and in producing
XX the polypeptides. The present sequence is an oligonucleotide used in the
XX exemplification of the invention
XX
XX SQ Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 3576 AAGCTTGGAGGAGCGCTG 3595
XX ||||| ||||| |||||
XX DB 1 AAGCTTGGAGGAGCGCTG 20
XX
XX RESULT 1333
XX ACC99708/c
XX ID ACC99708 standard; DNA; 20 BP.
XX
XX AC ACC99708;
XX
XX DT 02-SEP-2003 (first entry)
XX
XX DE RET PCR primer SEQ ID NO:89.
XX
XX KW Multiplex real-time quantitative PCR; PCR primer; copy number;
XX Alzheimer's disease; ss.
XX
XX OS Synthetic.
XX
XX PN WO2003048377-A2.
XX
XX PD 12-JUN-2003.
XX
XX PF 02-DEC-2002; 2002WO-US038806.
XX
XX PR 30-NOV-2001; 2001US-0336095P.
XX
XX PR 19-JUL-2002; 2002US-0397475P.
XX
XX PA (UYRP ) UNIV ROCHESTER.
XX (THER/) THERIANOS S.
XX
XX PI Zhu M, Coleman P;
XX
XX WPI; 2003-532841/50.
XX
XX PT Producing polypeptide of interest by culturing hybridoma or transformed
XX host cell which comprise a nucleotide sequence encoding polypeptide, in
XX culture medium free from each of a plant-derived or animal-derived
XX peptone.
XX
XX Example 1; Page 30; 77pp; English.
XX
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```
XX
XX PT Determining the relative copy number of a group of target nucleic acid
XX molecules present in a sample by performing a first or second PCR in a
XX PCR mixture and quantifying the number of copies of the second target
XX nucleic acid product.
XX
XX PS Disclosure; Fig 6; 118pp; English.
XX
XX CC The present invention describes a multiplex real-time quantitative PCR
XX method for determining the relative copy number of a group of target
XX nucleic acid molecules present in a sample. The method comprises: (1)
XX performing a first PCR in a PCR mixture; (2) performing a second PCR in a
XX PCR mixture; and (3) quantifying the number of copies of the second
XX target nucleic acid product present in the sample containing the target
XX nucleic acid molecule. Also described: (1) quantifying the copy number of
XX a group of target nucleic acids in a sample; and (2) determining whether
XX a subject is at risk of acquiring Alzheimer's disease. The method is
XX useful for determining the relative copy number of a group of target
XX nucleic acid molecules present in a sample for determining whether a
XX subject is at risk of acquiring Alzheimer's disease. ACC99620 to ACC99730
XX represent PCR primer used in the exemplification of the present invention
XX
XX SQ Sequence 20 BP; 10 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1810 TCCTTTGGGTCCTCTCTG 1829
XX ||||| ||||| |||||
XX DB 20 TCCTTTGGGTCCTCTCTG 1
XX
XX RESULT 1334
XX ACC85102
XX ID ACC85102 standard; DNA; 20 BP.
XX
XX AC ACC85102;
XX
XX DT 08-SEP-2003 (first entry)
XX
XX DE Neomycin resistance gene oligonucleotide #2.
XX
XX KW Recombinant protein production; mammalian cell culture; human;
XX erythropoietin; EPO; PCR; primer; ss.
XX
XX OS Unidentified.
XX
XX PN WO2003046162-A2.
XX
XX PD 05-JUN-2003.
XX
XX PF 28-NOV-2002; 2002WO-EP013431.
XX
XX PR 28-NOV-2001; 2001US-0333867P.
XX
XX PR 28-NOV-2001; 2001US-0333868P.
XX
XX PA (POLY-) POLYMUN SCI IMMUNOBIOLOGISCHE FORSCHUNG.
XX (KATI/) KATINGER H.
XX (KUNE/) KUNERT R.
XX (MUEL/) MUELLER D.
XX (UNTE/) UNTERLUGGAUER F.
XX
XX PI Katinger H, Kunert R, Mueller D, Unterluggauer F;
XX
XX WPI; 2003-513644/48.
XX
XX PT Producing polypeptide of interest by culturing hybridoma or transformed
XX host cell which comprise a nucleotide sequence encoding polypeptide, in
XX culture medium free from each of a plant-derived or animal-derived
XX peptone.
XX
XX Example 1; Page 30; 77pp; English.
XX
```

XX The present invention relates to a method of producing a polypeptide of
CC interest, which involves culturing a hybridoma or transformed host cell
CC in a culture medium for mammalian cell culture, where the medium
CC comprises water, buffer, energy source, amino acids, lipid source,
CC precursor, or iron source, non-ferrous metal ions, inorganic salts,
CC vitamins and cofactors, and is free from each of a plant-derived or
CC animal-derived peptone. An example protein which may be produced using
CC the method is human erythropoietin (EPO). The method is useful for
CC producing a polypeptide of interest chosen from human growth hormone,
CC human monoclonal antibodies, preferably of subclasses IgG, IgM and IgA,
CC and monoclonal human/mouse chimeric antibodies, where the transformed
CC host cell comprises at least two polynucleotide vectors that encode
CC different proteins of interest and where the different proteins are
CC different parts of an antibody, particularly the light and heavy chains
CC of an antibody. The present sequence is an oligonucleotide used in the
CC exemplification of the invention

XX Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 3576 AAGCTTGGAGGAGGAGCGTG 3595
||||| |||||||
Db 1 AAGCTTGTGGGAGGAGCGCTG 20

RESULT 1335
ACF04057/c
ID ACF04057 standard; DNA; 20 BP.
AC ACF04057;
XX ACF04057;
XX 15-OCT-2003 (first entry)
DT Human HNC10 cell TrkB gene PCR primer #4.
DE Human; neural crest stem cell line; transplantation; cell therapy;
KW Human; neural crest stem cell line; neuroprotective; cerebroprotective;
KW PCR; primer; ss.
XX Homo sapiens.
OS W02003054202-A1.
PN 03-JUL-2003.
PD 25-APR-2001; 2001WO-US013354.
XX 05-MAY-2000; 2000US-00565339.
XX (UYBR-) UNIV BRITISH COLUMBIA.
PA (CHIL-) CHILDRENS MEDICAL CENT.
PA (UYPE-) UNIV PENNSYLVANIA.
XX Kim SU, Snyder EY, Wolfe JH;
PI WPI; 2003-559151/52.
XX New primordial human neural crest stem cell having a pluripotent and self
PT renewing properties, useful for implantation in vivo for cell therapy
PT treatment of human neurological disorders and diseases.
XX Disclosure; Page 39; 70pp; English.
PS The present invention relates to a primordial human neural crest stem
CC cell line suitable for on-demand implantation in vivo into a living host
CC subject comprising a pluripotent and self-renewing neural crest stem cell
CC of human origin. The cell line is useful in the cell therapy treatment of
CC human neurological disorders and diseases. The present sequence is a PCR
CC primer used to isolate human genes from the HNC10 cell line

XX Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
SQ Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1678 GACTTCGGCTGCGCGGGA 1697
||||| |||||||
Db 20 GACTTTGGGATGTCGCGGGA 1

RESULT 1336
ADA15290
ID ADA15290 standard; DNA; 20 BP.
XX ADA15290;
XX ADA15290;
DT 06-NOV-2003 (first entry)
XX Mouse HYPLIP1 locus PCR primer #230.
DE Mouse; PCR; primer; ss; HYPLIP1; FCHL1; variation; lipid disorder;
KW allele; anti-lipid disorder; anti-cancer therapy; gene therapy;
KW familial combined hyperlipidaemia; coronary artery disease;
KW atherogenic lipoprotein phenotype; hyperapobetalipoproteinaemia;
KW hypertriglyceridaemia; low density lipoprotein subclass B; LDL;
KW familial dyslipidemic hypertension; syndrome X; hypercholesterolaemia;
KW obesity; insulin resistance; cancer; cytostatic; antilipaeamic;
KW hypotensive; anorectic.
XX Mus sp.
OS US2003064372-A1.
XX 03-APR-2003.
PD 07-SEP-2001; 2001US-00949428.
XX 22-JUN-2000; 2000US-0213322P.
XX (BODN/) BODNAR J S.
PA (CAST/) CASTELLANI L W.
PA (CHAT/) CHATTERJEE A.
PA (JONG/) JONG P D.
PA (LUSI/) LUSIS A J.
PA (OHME/) OHMEN J.
PA (ROSS/) ROSS D.
PA (TAFU/) TAFURI S.
PA (WUCC/) WU C.
XX Bodnar JS, Castellani LW, Chatterjee A, Jong PD, Lusia AJ;
PI Ohmen J, Ross D, Tafuri S, Wu C;
XX WPI; 2003-540780/51.
XX Novel isolated polynucleotide comprising a mouse or human familial
PT combined hyperlipidaemia 1 gene having a variation that is associated with
PT a lipid disorder, useful for identifying susceptibility to the lipid
PT disorder.
XX Claim 11; Page 39; 63pp; English.
PS The invention discloses isolated polynucleotides comprising mouse HYPLIP1
CC cDNA sequence, mouse HYPLIP1 genomic DNA, or the homologous human
CC familial combined hyperlipidaemia 1 (FCHL1) gene, where a variation in
CC the sequence is associated with a lipid disorder. Also claimed is an
CC isolated polypeptide comprising a variant form of the mouse HYPLIP1 amino
CC acid sequence, or a variant form of a fully defined human FCHL1 amino
CC acid sequence, where the variant is associated with the lipid disorder,
CC an isolated polynucleotide having at least 12 contiguous nucleotides of
CC the isolated polynucleotides, where the 12 contiguous nucleotides span
CC the variation position, an isolated polypeptide comprising 4 contiguous

CC amino acids of the encode polypeptides, where the 4 contiguous amino
CC acids span the variation position, a kit for the detection of the FCHL1
CC locus comprising, an isolated antibody, identifying susceptibility to a
CC lipid disorder which comprises comparing the nucleotide sequence of the
CC suspected FCHL1 allele with a wild-type FCHL1 nucleotide sequence, where
CC the difference between the suspected allele and the wild-type sequence
CC identifies a sequence variation of FCHL1 nucleotide sequence and a
CC pharmaceutical composition. Also disclosed is a transgenic animal which
CC carries an altered HYPLIPI or FCHL1 allele and a method for screening
CC drugs for inhibition or restoration of FCHL1 gene function as an anti-
CC lipid disorder or anti-cancer therapy. The polynucleotides, polypeptides
CC and antibodies are useful for treating or preventing (e.g. gene therapy)
CC a lipid disorder associated with expression of FCHL1, for diagnosis or
CC prognosis of predisposition to lipid disorder, and cancer and for
CC treating a lipid disorder such as familial combined hyperlipidaemia,
CC coronary artery disease, atherogenic lipoprotein phenotype,
CC hyperapobetalipoproteinaemia, hypertriglyceridaemia, low density
CC lipoprotein (LDL) subclass B, familial dyslipidemic hypertension,
CC syndrome X, hypercholesterolaemia, obesity, insulin resistance and
CC cancer. The sequence presented is a PCR primer which was used to amplify
CC part of the mouse HYPLIPI locus.

XX
SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3651 CTTGCTTGCTGCAGGCCA 3670

Db 1 CTTGCATGCTGCAGTCTGA 20

RESULT 1337

ACD26628

ID ACD26628 standard; DNA; 20 BP.

XX AC ACD26628;

XX AC ACD26628;

DT 11-SEP-2003 (first entry)

DE Soluble adenylyl cyclase (sAC) RT-PCR primer #1.

XX Rat; soluble adenylyl cyclase; sAC; glucose regulation; insulin release;
KW pancreatic islet cell; cAMP production; physiological bicarbonate level;
KW reverse transcriptase; RT-PCR; primer; ss.

XX Synthetic.

XX US6544768-B1.

XX 08-APR-2003.

XX 11-MAY-2000; 2000US-00568407.

XX 11-MAY-1999; 99US-0133802P.

XX 26-OCT-1999; 99US-0161534P.

XX (CORR) CORNELL RES FOUND INC.

XX Buck J, Levin LR;

XX WPI; 2003-531117/50.

XX New nucleic acid molecule encoding soluble adenylyl cyclase polypeptide,
PT useful for regulating insulin secretion from pancreatic islet cells.

XX Example 1; Col 37; 50pp; English.

XX The invention describes an isolated nucleic acid molecule (I), comprising
CC a sequence encoding a polypeptide that comprises adenylyl cyclase
CC catalytic domains C1 and C2 having at least 85% identity to a 50 kD-
CC terminal domain comprising catalytic domains C1 and C2 of soluble

CC adenylyl cyclase. The soluble adenylyl cyclase (sAC) comprises a fully
CC defined sequence (S1) of 1608 or 1610 amino acids as given in the
CC specification. (I) is useful for encoding soluble adenylyl cyclase. sAC
CC is useful for glucose regulation of insulin release from pancreatic islet
CC cells, and for regulating cAMP production. sAC is also useful as a sensor
CC in its capacity as an enzyme to determine physiological bicarbonate
CC levels. This sequence represents a reverse transcriptase PCR primer used
CC to analyse the expression of soluble adenylyl cyclase (sAC)

XX
SQ Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1998 CAAGCAGCTGGTGGAGGACC 2017

Db 1 CGAGCAGCTGGTGGAGATCC 20

RESULT 1338

AAL61164/c

ID AAL61164 standard; DNA; 20 BP.

XX AC AAL61164;

XX AC AAL61164;

DT 22-SEP-2003 (first entry)

DE Human ARX gene 3' untranslated region (UTR) amplifying primer, F.

XX Homeobox gene; ARX; ARX-related disorder; X-linked myoclonic epilepsy;
KW infantile spasm; mental retardation; Partington syndrome; diagnosis;
KW dystonia; human; untranslated region; UTR; PCR; primer; ss.

XX Homo sapiens.

XX WO2003045989-A1.

XX 05-JUN-2003.

XX 26-NOV-2002; 2002WO-AU001599.

XX 26-NOV-2001; 2001AU-00009095.

XX (WOME-) WOMEN'S & CHILDREN'S HOSPITAL.

XX Gecz J, Stromme P;

XX WPI; 2003-505184/47.

XX New ARX gene, useful for diagnosing ARX-related disorders e.g., mild
PT mental retardation, infantile spasms or dystonia.

XX Disclosure; Page 25; 74pp; English.

XX The invention relates to human orthologue of Aristales homeobox gene,
CC ARX. ARX gene is associated with infantile spasms (IS), non-specific X-
CC linked mental retardation, X-linked myoclonic epilepsy and Partington
CC syndrome. ARX gene is useful for diagnosing ARX-related disorders e.g.,
CC mild mental retardation, infantile spasms or dystonia. The present
CC sequence is a PCR primer used for amplifying human ARX gene 3'
CC untranslated region (UTR)

XX
SQ Sequence 20 BP; 4 A; 6 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1836 CTTACGCTGGGGGCTCC 1855

Db 20 CTTACGCTGGGGGCTCC 1

```
RESULT 1339
ADB95852
ID ADB95852 standard; DNA; 20 BP.
XX
XX
AC ADB95852;
XX
XX
DT 04-DEC-2003 (first entry)
XX
XX
DE Mouse HYPLIPI PCR primer #230.
XX
XX
KW cytostatic; antilipemic; gene therapy; peptide therapy; HYPLIPI; FCHLI;
KW cancer; metabolic pathway; cellular mechanism; lipid disorder;
KW Familial combined hyperlipidaemia; mouse; PCR; primer; ss.
XX
XX
OS Mus sp.
XX
XX
PN US2003054418-A1.
XX
XX
PD 20-MAR-2003.
XX
XX
PF 07-SEP-2001; 2001US-00949427.
XX
XX
PR 08-SEP-2000; 2000US-0231322P.
XX
XX
PA (BODN/) BODNAR J S.
PA (CAST/) CASTELLANI L W.
PA (CHAT/) CHATTERJEE A.
PA (JONG/) JONG P D.
PA (LUSI/) LUSIS A J.
PA (OHME/) OHMEN J.
PA (ROSS/) ROSS D.
PA (TAFU/) TAFURI S.
PA (WUCC/) WU C.
XX
XX
PI Bodnar JS, Castellani LW, Chatterjee A, Jong PD, Lusia AJ;
PI Ohmen J, Ross D, Tafuri S, Wu C;
XX
XX
WPI; 2003-695901/66.
XX
XX
PT Novel human FCHLI or mouse HYPLIPI polypeptide, useful for drug
PT screening, peptide therapy of lipid disorder or cancer.
XX
XX
PS Claim 11; Page 37; 56pp; English.
XX
XX
CC The invention describes an isolated polypeptide (I) comprising a variant
CC form of a mouse HYPLIPI polypeptide sequence (S1) or a human FCHLI
CC polypeptide sequence (S2), not given in the specification, where the
CC variant form is associated with cancer, or an amino acid sequence having
CC at least 65 % sequence identity to (S1) or (S2). A composition comprising
CC DNA encoding (I) is useful for treating or preventing cancer associated
CC with expression of FCHLI. FCHLI gene or HYPLIPI gene and its product are
CC useful for the study of metabolic pathway and cellular mechanism to
CC identify other genes, receptors and relationships that contribute to
CC lipid disorder and cancer. FCHLI gene or its fragments are useful in gene
CC therapy to increase the amount of the expression products of the gene for
CC the treatment of lipid disorder or cancerous cells. The sequence
CC variation of FCHLI gene or HYPLIPI gene is also useful in the diagnosis
CC and prognosis of predisposition to lipid disorder and cancer. Antisense
CC polynucleotide sequences are useful in preventing or diminishing the
CC expression of HYPLIPI or FCHLI locus. This sequence represents a primer
CC used in the analysis of the mouse HYPLIPI gene.
XX
XX
SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 3651 CTTGCTTGCTGCAGGCGCA 3670
DB 1 CTTGCATGCCTGCAGGTCGA 20
RESULT 1340
ADD21582/c
ID ADD21582 standard; DNA; 20 BP.
XX
XX
AC ADD21582;
XX
XX
DT 15-JAN-2004 (first entry)
XX
XX
DE Human mdm2 antisense oligonucleotide #145.
XX
XX
KW antisense oligonucleotide; human; mdm2; hyperproliferation;
KW hyperproliferative disorder; cancer; psoriasis; fibrosis;
KW atherosclerosis; restenosis; apoptosis modulation; p21; ss;
KW 2'-methoxyethoxy-residue; phosphorothioate backbone.
XX
XX
OS Homo sapiens.
XX
XX
PN WO2003048315-A2.
XX
XX
PD 12-JUN-2003.
XX
XX
PF 02-DEC-2002; 2002WO-US038281.
XX
XX
PR 04-DEC-2001; 2001US-00005344.
XX
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX
PI Miraglia LJ, Nero PS, Graham MJ, Monia BP, Koller E, Chiang MY;
PI Manoharan M;
XX
XX
WPI; 2003-577263/54.
XX
XX
PT Novel antisense compound targeted to 5' untranslated region, coding
PT region, or intron:exon junction of nucleic acid molecule encoding mdm2,
PT useful for treating e.g. cancer, psoriasis or restenosis by inhibiting
PT mdm2 expression.
XX
XX
PS Claim 4; SEQ ID NO 147; 289pp; English.
XX
XX
CC The invention comprises antisense oligonucleotides which are targeted to
CC the human mdm2 gene. The antisense oligonucleotides of the invention are
CC useful for reducing hyperproliferation of human cells. The antisense
CC oligonucleotides are also useful for treating: hyperproliferative
CC disorders (e.g. cancer), psoriasis, fibrosis, atherosclerosis, or
CC restenosis. The antisense oligonucleotides are also useful for modulating
CC apoptosis, and for increasing expression of p21. The present DNA sequence
CC represents a human mdm2 gene antisense oligonucleotide of the invention.
CC The present sequence contains 2'-methoxyethoxy-residues and has a
CC phosphorothioate backbone.
XX
XX
SQ Sequence 20 BP; 4 A; 7 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1346 CTCAGATGCAGATGATGAAG 1365
DB 20 CTCAGATGAAGATGATGAGG 1
RESULT 1341
ADD21644/c
ID ADD21644 standard; DNA; 20 BP.
XX
XX
AC ADD21644;
XX
XX
DT 15-JAN-2004 (first entry)
XX
XX
DE Human mdm2 antisense oligonucleotide #207.
KW antisense oligonucleotide; human; mdm2; hyperproliferation;
```

```
KW hyperproliferative disorder; cancer; psoriasis; fibrosis;
KW atherosclerosis; restenosis; apoptosis modulation; p21; ss;
XX 2'-methoxyethoxy-residue; phosphorothioate backbone.
OS Homo sapiens.
XX WO2003048315-A2.
XX 12-JUN-2003.
XX 02-DEC-2002; 2002WO-US038281.
XX 04-DEC-2001; 2001US-00005344.
XX (ISIS-) ISIS PHARM INC.
XX Miraglia LJ, Nero PS, Graham MJ, Monia BP, Koller E, Chiang MY;
PI Manoharan M;
XX WPI; 2003-577263/54.
XX Novel antisense compound targeted to 5' untranslated region, coding
PT region, or intron:exon junction of nucleic acid molecule encoding mdm2,
PT useful for treating e.g. cancer, psoriasis or restenosis by inhibiting
PT mdm2 expression.
XX Example 9; SEQ ID NO 209; 289pp; English.
XX The invention comprises antisense oligonucleotides which are targeted to
CC the human mdm2 gene. The antisense oligonucleotides of the invention are
CC useful for reducing hyperproliferation of human cells. The antisense
CC oligonucleotides are also useful for treating: hyperproliferative
CC disorders (e.g. cancer), psoriasis, fibrosis, atherosclerosis, or
CC restenosis. The antisense oligonucleotides are also useful for modulating
CC apoptosis, and for increasing expression of p21. The present DNA sequence
CC represents a human mdm2 gene antisense oligonucleotide of the invention.
CC The present sequence contains 2'-methoxyethoxy-residues and has a
CC phosphorothioate backbone.
XX Sequence 20 BP; 11 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 3462 TTATATATATCTATATATAT 3481
DB 20 TTATATATTCTAACTATAT 1
RESULT 1342
AAD62208/C
ID AAD62208 standard; DNA; 20 BP.
XX AAD62208;
XX 15-JAN-2004 (first entry)
XX Human haematopoietic cell tyrosine kinase antisense oligo ISIS #150763.
DE
XX Haematopoietic cell; tyrosine kinase; hyperproliferative disorder;
KW cancer; therapy; inflammation; diabetes; viral infection; inflammation;
KW tumour; cytostatic; virucide; antisense therapy; antisense; human;
KW phosphorothioate backbone; ss.
XX Homo sapiens.
OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
```

```
FT methyl cytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"
XX US2003125275-A1.
XX 03-JUL-2003.
XX 04-DEC-2001; 2001US-00007010.
XX 04-DEC-2001; 2001US-00007010.
XX (ISIS-) ISIS PHARM INC.
XX Borchers AH, Dobie KW;
XX WPI; 2003-811000/76.
XX New antisense oligonucleotides targeted to nucleic acids encoding
PT haematopoietic cell protein tyrosine kinase, useful for diagnosing or
PT treating cancer (e.g. leukemia), inflammation, diabetes or viral
PT infections.
XX Example 15; Page 26; 59pp; English.
XX The invention relates to a compound targeted to a nucleic acid molecule
CC encoding haematopoietic cell protein tyrosine kinase. The compound
CC inhibits the expression of haematopoietic cell protein tyrosine kinase
CC and it specifically hybridises with the nucleic acid molecule encoding
CC the tyrosine kinase or with at least an 8-nucleobase portion of an active
CC site on the nucleic acid molecule encoding the tyrosine kinase. The
CC antisense compounds are useful for modulating the expression of
CC haematopoietic cell protein tyrosine kinase and treating diseases or
CC conditions associated with the expression of the tyrosine kinase, such as
CC hyperproliferative disorders (e.g. cancer), inflammation, diabetes or a
CC viral infection. The antisense compounds are also useful for diagnostics,
CC therapeutics, prophylaxis, e.g. to prevent or delay infection,
CC inflammation or tumour formation, as research reagents and kits and in
CC distinguishing between functions of various members of a biological
CC pathway. The present sequence is human haematopoietic cell tyrosine
CC kinase antisense oligonucleotide
XX Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1679 ACTTCGGGCTGGCCGGGAC 1698
DB 20 ACTTTGGCTGGCCGGGTC 1
RESULT 1343
ADF88448
ID ADF88448 standard; DNA; 20 BP.
XX ADF88448;
XX 26-FEB-2004 (first entry)
XX Single nucleotide polymorphism detection primer, SEQ ID No 2031.
DE human; single nucleotide polymorphism; microarray; side effect; ss;
KW primer; PCR.
XX Synthetic.
OS
```

```
OS Homo sapiens.
XX
XX JP2003235571-A.
XX
XX 26-AUG-2003.
XX
XX 12-FEB-2002; 2002JP-00034717.
XX
XX 12-FEB-2002; 2002JP-00034717.
XX
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
XX WPI; 2003-820454/77.
XX
XX Novel polynucleotide useful for detecting single nucleotide polymorphisms
XX in human gene.
XX
XX Claim 2; SEQ ID NO 2031; 704pp; Japanese.
XX
XX The invention relates to a novel polynucleotide isolated and purified
XX from a human gene having any one of 935 fully defined sequences as given
XX in specification, or a sequence having a base substitution. The invention
XX further relates to: an oligonucleotide containing single nucleotide
XX polymorphisms; a PCR primer set chosen from the combination of two DNA
XX fragments from any one of 1220 fully defined sequences as given in
XX specification; a labelling probe containing the SNP containing oligo; and
XX a microarray equipped with the SNP containing oligo. The isolated human
XX gene of the invention is useful for detecting the single nucleotide
XX polymorphisms in human gene. The isolated human gene is also useful for
XX diagnosis of disease and determination of side effect to a medical agent.
XX The isolated human gene is also effective in detecting single nucleotide
XX polymorphisms in a human gene. This polynucleotide sequence represents
XX one of the PCR primers used in the single nucleotide polymorphism
XX detection method of the invention.
XX
XX Sequence 20 BP; 2 A; 9 C; 2 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 921 CTTCTTCCTGTTTCATCTCG 940
XX 1 CTTCTTCCTGCTCAACCTCG 20
XX
XX RESULT 1344
XX ADG93079/c
XX ID ADG93079 standard; DNA; 20 BP.
XX
XX AC ADG93079;
XX
XX DT 11-MAR-2004 (first entry)
XX
XX Human SHH specific antisense oligonucleotide, ISIS 104352.
XX
XX DE Sonic hedgehog; SHH; cancer; autoimmune disease; inflammatory disorder;
XX antisense gene therapy; human; antisense; phosphorothioate backbone; ss.
XX
XX OS Synthetic.
XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone where all cytidine
XX residues are 5-methyl cytidines"
XX
XX modified_base 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl reidues"
XX
XX modified_base 16..20
```

```
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl reidues"
XX
XX US2003105041-A1.
XX
XX 05-JUN-2003.
XX
XX 16-NOV-2001; 2001US-00001844.
XX
XX 16-NOV-2001; 2001US-00001844.
XX
XX (BENN/) BENNETT C F.
XX (COMS/) COWSERT L M.
XX
XX Bennett CF, Cowsert LM;
XX
XX WPI; 2003-897023/82.
XX
XX New compound for inhibiting Sonic hedgehog (SHH) expression in cells or
XX tissues and for treating an animal having a disease or condition
XX associated with SHH, such as cancer, an autoimmune disease, or an
XX inflammatory disorder.
XX
XX Example 15; SEQ ID NO 33; 36pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of Sonic hedgehog (SHH). The composition
XX comprises antisense compounds targeted to SHH. The antisense compound is
XX used to inhibit the expression of SHH in cells or tissues and to treat an
XX animal having a disease or condition associated with SHH, such as cancer,
XX an autoimmune disease or an inflammatory disorder. It is also useful in
XX differential and/or combinatorial analyses to elucidate expression
XX patterns of a portion or the entire complement of genes expressed within
XX cells and tissues. The antisense compounds are useful in antisense gene
XX therapy. The present sequence is an antisense oligonucleotide targeted
XX to human SHH DNA. This sequence is used to illustrate the method of the
XX invention.
XX
XX Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 2004 GCTGTGAGGAGACCTGGACC 2023
XX 20 GCTGTGAGGAGACCTGGACC 1
XX
XX RESULT 1345
XX ADH63144/c
XX ID ADH63144 standard; DNA; 20 BP.
XX
XX AC ADH63144;
XX
XX DT 25-MAR-2004 (first entry)
XX
XX DE FGF receptor 2 antisense oligonucleotide, ISIS143404, SEQ ID 98.
XX
XX OS Cytostatic; Vulnerary; Gene Therapy; Antisense;
XX KW fibroblast growth factor receptor 2; FGF receptor 2;
XX KW hyperproliferative disorder; cancer; developmental disorder;
XX wound healing; ss; phosphorothioate.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "This oligonucleotide has a phosphorothioate
XX backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
XX FT
```

and 3' ends, which are 5 nucleotides in length. Also all cytidine residues are 5-methylcytidine"

FT WO2003024987-A1.
 XX 27-MAR-2003.
 XX 12-SEP-2002; 2002WO-US029149.
 XX 14-SEP-2001; 2001US-00954556.
 XX (ISIS-) ISIS PHARM INC.
 XX Monia BP, Freier SM, Cooper SR;
 XX WPI; 2003-354582/33.
 XX New antisense oligonucleotides for modulating expression of genes
 PT encoding fibroblast growth factor receptor 2, useful for treating
 PT hyperproliferative (e.g. cancer of the colon, lung, breast or skin) or
 PT developmental disorders.
 XX
 PS Claim 3; SEQ ID NO 98; 200pp; English.
 XX The present invention relates to antisense oligonucleotides (ADH63077-
 CC ADH63154) targeted to fibroblast growth factor (FGF) receptor 2 coding
 CC sequences (ADH63049 and ADH63056), which specifically hybridize with and
 CC inhibit FGF receptor 2 expression. The antisense oligonucleotides are
 CC useful for treating or preventing diseases or conditions associated with
 CC FGF receptor 2 in an animal, e.g. hyperproliferative disorders
 CC (particularly cancer of the colon, lung, breast or skin), or
 CC developmental disorders. The antisense compound may also be used in wound
 CC healing. The antisense compounds are useful for diagnostics,
 CC therapeutics, prophylaxis, or as research reagents or kits.
 XX
 SQ Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1945 TACATGATCATCGGGAGTG 1964
 Db 20 TACATGATCATCGGGAGTG 1
 RESULT 1346
 ABZ85121
 ID ABZ85121 standard; DNA; 20 BP.
 XX AC ABZ85121;
 XX 17-OCT-2003 (first entry)
 XX Human oligonucleotide sequence.
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX Homo sapiens.
 OS
 XX WO200285308-A2.
 PN 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013135.
 PF 24-APR-2001; 2001US-0286137P.
 XX

(EPIG-) EPIGENESIS PHARM INC.
 XX Myce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Claim 15; SEQ ID NO 363; 872pp; English.
 XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive, have a
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 5 A; 9 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2160 CCCGGCCCCCACCAGCAGTG 2179
 Db 1 CACGACTCCACCCAGCAGTG 20
 RESULT 1347
 ABZ91733
 ID ABZ91733 standard; DNA; 20 BP.
 XX AC ABZ91733;
 XX 17-OCT-2003 (first entry)
 XX Human oligonucleotide sequence.
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX Homo sapiens.
 OS
 XX WO200285308-A2.
 PN 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013135.
 PF 24-APR-2001; 2001US-0286137P.
 XX

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PA (EPIC-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 6975; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 11 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2824 ATATATACATATATATATAT 2843
DB 1 ATATGAAATATATATATAT 20
|||||
|||||

RESULT 1348
ABZ85521
ID ABZ85521 standard; DNA; 20 BP.
XX
XX AC ABZ85521;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.
XX

PA (EPIC-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Claim 15; SEQ ID NO 763; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 9 A; 1 C; 3 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2823 TATATATACATATATATATATA 2842
DB 1 TGTAGATACATATATAGATA 20
|||||
|||||

RESULT 1349
ABZ85506/C
ID ABZ85506 standard; DNA; 20 BP.
XX
XX AC ABZ85506;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.
XX
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PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 748; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 5 A; 0 C; 11 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 317 ACCCCACTCCCTCCATCTCC 336
DB 20 ACCCTACTCCCTCCAAATTC 1
|||||
|||||

RESULT 1350
ABZ87924
ID ABZ87924 standard; DNA; 20 BP.
XX
AC ABZ87924;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
XX WO20028308-A2.
FN
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US013135.
PF
XX 24-APR-2001; 2001US-0286137P.
PR
XX

PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 748; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 9 A; 2 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2275 AGACTCAGTCGAGATGGAGA 2294
DB 1 AGACTCAGGGAAGAAGAGA 20
|||||
|||||

RESULT 1351
ADA26867/c
ID ADA26867 standard; DNA; 20 BP.
XX
AC ADA26867;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human FLJ20297 reverse PCR primer #151.
XX
XX Metastasis; neoplastic growth; detection; prediction;
KW neoplastic growth marker; drug screening; cancer; tumour;
KW gastrointestinal; prostate; breast; colorectal; diagnostic imaging;
KW drug targeting; human; cytostatic; reverse transcription-PCR; RT-PCR;
KW primer; ss.
XX
OS Homo sapiens.
XX
XX WO2003031930-A2.
FN
XX 17-APR-2003.
PD
XX 02-OCT-2002; 2002WO-US031247.
PF
XX 09-OCT-2001; 2001US-0327332P.
PR
XX (UYJO ) UNIV JOHNS HOPKINS.
PA

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KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 OS Homo sapiens.
 XX WO200285309-A2.
 XX 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013143.
 XX 24-APR-2001; 2001US-0286036P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 PS Claim 15; SEQ ID NO 748; 763pp; English.
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX Sequence 20 BP; 5 A; 0 C; 11 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 317 ACCCGACTCCCTCCATCTCC 336
 |||||
 DB 20 ACCCTACTCCCTCCATCTCC 1
 |||||
 RESULT 1354
 ABD21351
 ID ABD21351 standard; DNA; 20 BP.
 XX

AC ABD21351;
 XX DT
 XX 29-JUL-2004 (first entry)
 DE Human transglutaminase-derived oligo SEQ ID 363.
 XX Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX Homo sapiens.
 OS WO200285309-A2.
 XX 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013143.
 XX 24-APR-2001; 2001US-0286036P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 PS Claim 15; SEQ ID NO 363; 763pp; English.
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX Sequence 20 BP; 5 A; 9 C; 4 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 20;

| | |
|-------------|--|
| CC | distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. |
| CC | The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it |
| XX | Sequence 20 BP; 9 A; 2 C; 8 G; 1 T; 0 U; 0 Other; |
| XX | Query Match 0.4%; Score 15.2; DB 1; Length 20; |
| XX | Best Local Similarity 85.0%; Pred. No. 1.5e-03; |
| XX | Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0; |
| QY | 2275 AGACTCAGTCGACATGGAGA 2294 |
| DB | 1 AGACTCAGTCGACATGGAGA 20 |
| RESULT 1356 | |
| ABD27963 | |
| ID | ABD27963 standard; DNA; 20 BP. |
| XX | ABD27963; |
| XX | 29-JUL-2004 (first entry) |
| XX | AA497002-derived oligonucleotide SEQ ID 6975. |
| XX | Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer. |
| OS | Homo sapiens. |
| XX | WO200285309-A2. |
| XX | 31-OCT-2002. |
| XX | 23-APR-2002; 2002WO-US013143. |
| XX | 24-APR-2001; 2001US-0286036P. |
| XX | (EPIG-) EPIGENESIS PHARM INC. |
| XX | Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D; Miller S, Tang L, Shahabuddin S; WPI; 2003-093058/08. |
| XX | Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent. |
| XX | Claim 15; SEQ ID NO 6975; 763pp; English. |
| XX | This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory |

CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 11 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2824 ATATATACATATATATATAT 2843

Db 1 ATATGAATATATATATATAT 20

RESULT 1357

ABD21751
 ID ABD21751 standard; DNA; 20 BP.

AC ABD21751;

DT 29-JUL-2004 (first entry)

DE Human stannocalcin-derived oligo SEQ ID 763.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

OS Homo sapiens.

XX WO200285309-A2.

PN 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

PR (SPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

PS Claim 15; SEQ ID NO 763; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX

SQ Sequence 20 BP; 9 A; 1 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.5e+03;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2823 TATATATACATATATATATA 2842

Db 1 TGTAGATACATATATAGATA 20

RESULT 1358

ADF42870/C

ID ADF42870 standard; DNA; 20 BP.

XX ADF42870;

XX 12-FEB-2004 (first entry)

XX Human RET proto-oncogene PCR primer SEQ ID NO 4.

XX human; ovarian cyst; RET; tumour; anticancer; taxol; cisplatin;
 KW adriamycin; epirubicin; cyclophosphamide; camptothecin; cytostatic;
 KW gene therapy; proto-oncogene; ss; primer; PCR.

OS Homo sapiens.

XX JP2003289877-A.

PN 14-OCT-2003.

XX 05-APR-2002; 2002JP-00104215.

XX 05-APR-2002; 2002JP-00104215.

XX (SAGA/) SASAKI H.

XX WPI; 2004-038435/04.

XX Novel ovarian cyst marker substance containing RET gene product, useful

```
PT as target in diagnosing ovarian cyst.
XX
PS Claim 11; SEQ ID NO 4; 22pp; Japanese.
XX
CC This invention describes a novel human ovarian cyst marker containing the
CC RET proto-oncogene. The RET gene can be used in manufacturing a tumour
CC pharmaceutical for treating an ovarian cyst or for treating a tumour
CC which also comprises an anticancer compound chosen from a taxol, a
CC cisplatin, an adriamycin, an epirubicin, a cyclophosphamide and a
CC camptothecin. The products of the invention have cytostatic and
CC anticancer activity and can be used in gene therapy. ADF42867-ADF42884
CC represent PCR primers used to amplify the human RET proto-oncogene
CC described in the disclosure of the invention.
XX
XX Sequence 20 BP; 10 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1810 TCCTTTGGGTCTCTGCTCTG 1829
XX 20 TCCTTTGGGTCTCTGCTG 1
XX
XX
XX RESULT 1359
XX ADF78926
XX ID ADF78926 standard; DNA; 20 BP.
XX
XX AC ADF78926;
XX
XX 26-FEB-2004 (first entry)
XX
XX Oligonucleotide probe #52 used in biochip manufacturing.
XX
XX Illumination system; biochip illumination; divergent diffuser;
XX optical fibre; laser light; glass substrate; bioarray;
XX laser emitting diode; LED; biochip reader; biochip manufacturing; probe;
XX ss.
XX
XX Synthetic.
XX
XX US6620623-B1.
XX
XX 16-SEP-2003.
XX
XX 06-MAY-2002; 2002US-00139842.
XX
XX 06-MAY-2002; 2002US-00139842.
XX (UYCH-) UNIV CHICAGO.
XX
XX Yershov G, Alferov O, Kukhtin A;
XX
XX WPI; 2004-008450/01.
XX
XX Biochip illumination apparatus includes respective divergent diffuser
XX proximate to each line of optical fiber faces for coupling and diffusing
XX laser light evenly through opposing sides of glass substrate.
XX
XX Disclosure; SEQ ID NO 52; 27pp; English.
XX
XX The present invention relates to method of illumination and a biochip
XX illumination apparatus that has a respective divergent diffuser proximate
XX to each line of optical fiber faces for coupling and diffusing laser
XX light evenly through the opposing sides of the glass substrate to
XX illuminate the bioarray carried by the glass substrate. The illumination
XX source includes a low power non-collimated laser emitting diode (LED).
XX The divergent diffuser is made of silicon. The apparatus is useful for
XX bioarray illumination in a biochip reader. The invention provides a
XX superior signal to noise ratio as compared with conventional illumination
XX systems. The present sequence represents an oligonucleotide probe used in
XX biochip manufacturing.
XX
XX Sequence 20 BP; 10 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1810 TCCTTTGGGTCTCTGCTCTG 1829
XX 20 TCCTTTGGGTCTCTGCTG 1
XX
XX
XX RESULT 1359
XX ADF78926
XX ID ADF78926 standard; DNA; 20 BP.
XX
XX AC ADF78926;
XX
XX 26-FEB-2004 (first entry)
XX
XX Oligonucleotide probe #53 used in biochip manufacturing.
XX
XX Illumination system; biochip illumination; divergent diffuser;
XX optical fibre; laser light; glass substrate; bioarray;
XX laser emitting diode; LED; biochip reader; biochip manufacturing; probe;
XX ss.
XX
XX Synthetic.
XX
XX US6620623-B1.
XX
XX 16-SEP-2003.
XX
XX 06-MAY-2002; 2002US-00139842.
XX
XX 06-MAY-2002; 2002US-00139842.
XX (UYCH-) UNIV CHICAGO.
XX
XX Yershov G, Alferov O, Kukhtin A;
XX
XX WPI; 2004-008450/01.
XX
XX Biochip illumination apparatus includes respective divergent diffuser
XX proximate to each line of optical fiber faces for coupling and diffusing
XX laser light evenly through opposing sides of glass substrate.
XX
XX Disclosure; SEQ ID NO 52; 27pp; English.
XX
XX The present invention relates to method of illumination and a biochip
XX illumination apparatus that has a respective divergent diffuser proximate
XX to each line of optical fiber faces for coupling and diffusing laser
XX light evenly through the opposing sides of the glass substrate to
XX illuminate the bioarray carried by the glass substrate. The illumination
XX source includes a low power non-collimated laser emitting diode (LED).
XX The divergent diffuser is made of silicon. The apparatus is useful for
XX bioarray illumination in a biochip reader. The invention provides a
XX superior signal to noise ratio as compared with conventional illumination
XX systems. The present sequence represents an oligonucleotide probe used in
XX biochip manufacturing.
XX
XX Sequence 20 BP; 10 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1350 GATGGAGATGATGAGATGA 1369
XX 1 GATGATGATGATGATGATGA 20
XX
XX
XX RESULT 1361
XX ADF78948
XX ID ADF78948 standard; DNA; 20 BP.
XX
XX AC ADF78948;
XX
XX 26-FEB-2004 (first entry)
XX
XX Oligonucleotide probe #63 used in biochip manufacturing.
XX
XX Illumination system; biochip illumination; divergent diffuser;
XX optical fibre; laser light; glass substrate; bioarray;
XX laser emitting diode; LED; biochip reader; biochip manufacturing; probe;
XX ss.
XX
XX Synthetic.
XX
XX US6620623-B1.
XX
XX 16-SEP-2003.
XX
XX 06-MAY-2002; 2002US-00139842.
XX
XX 06-MAY-2002; 2002US-00139842.
XX (UYCH-) UNIV CHICAGO.
XX
XX Yershov G, Alferov O, Kukhtin A;
XX
XX WPI; 2004-008450/01.
XX
XX Biochip illumination apparatus includes respective divergent diffuser
XX proximate to each line of optical fiber faces for coupling and diffusing
XX laser light evenly through opposing sides of glass substrate.
XX
XX Disclosure; SEQ ID NO 74; 27pp; English.
XX
XX The present invention relates to method of illumination and a biochip
XX illumination apparatus that has a respective divergent diffuser proximate
XX to each line of optical fiber faces for coupling and diffusing laser
XX light evenly through the opposing sides of the glass substrate to
XX illuminate the bioarray carried by the glass substrate. The illumination
XX source includes a low power non-collimated laser emitting diode (LED).
XX The divergent diffuser is made of silicon. The apparatus is useful for
XX bioarray illumination in a biochip reader. The invention provides a
XX superior signal to noise ratio as compared with conventional illumination
XX systems. The present sequence represents an oligonucleotide probe used in
XX biochip manufacturing.
XX
XX Sequence 20 BP; 7 A; 0 C; 7 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1350 GATGGAGATGATGAGATGA 1369
XX 1 GATGATGATGATGATGATGA 20
XX
XX
XX RESULT 1361
```


DR WPI; 2004-082076/08.

XX New isolated MTS24 thymic epithelial progenitor cell, useful for treating

PT cancer, allergy, autoimmune disease, produces a MTS24 protein.

XX

PS Example 5; SEQ ID NO 4; 70pp; English.

XX

CC The present sequence is that of a PCR primer for keratinocyte growth

CC factor receptor (KGFR). RT-PCR was used to examine gene transcripts of

CC importance to thymus organogenesis in murine thymic epithelial cells

CC (TEC) expressing the cell surface glycoprotein MTS24. Transcripts for

CC KGFR were found in both MTS24+ and MTS24- TECs. The present invention

CC provides progenitor TECs which give rise to the complete thymus

CC microenvironment including both cortical and medullary epithelial

CC lineages. These progenitor cells are identified by cell surface

CC expression of MTS24. The cells can be used to prevent or treat diseases

CC which can be alleviated by increasing the number of T cells and/or

CC altering the T cell population of a subject. New thymic tissue derived

CC from MTS24+ TECs is able to uptake appropriate T cell precursors such as

CC haematopoietic stem cells or common lymphoid progenitor cells and/or

CC other bone marrow cells from the blood and convert them in the new thymic

CC tissue to both new T cells and dendritic cells. MTS24+ TECs can be used

CC to induce tolerance in a subject to a graft from a mismatched donor, to

CC prevent or treat an autoimmune disease, to enhance an immune response to

CC an antigen (especially to treat HIV infection following HAART treatment),

CC to treat an allergy, and to prevent or treat cancer (e.g. following

CC chemotherapy, radiation therapy or bone marrow transplantation). The

CC MTS24+ TECs may be genetically modified e.g. to express a transgene

CC encoding a polypeptide, double-stranded RNA, catalytic nucleic acid or

CC antisense oligonucleotide.

XX

SQ Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.5e+03;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1310 ACGATGCCACTGACAGGAC 1329

DB 20 ATGATGCCACAGAGAGGAC 1

RESULT 1364

AD126621/C

ID AD126621 standard; DNA; 20 BP.

XX

AC AD126621;

XX

DT 15-APR-2004 (first entry)

XX

DE Rat PIM1 antisense oligonucleotide K18.

XX

KW pain modulator; PIM kinase family; locked nucleic acid; LNA;

KW phosphorothioate; analgesic; uropathic; antipruritic; cytostatic;

KW antiinflammatory; antiasthmatic; antisense; inhibition; gene therapy;

KW tactile allodynia; urinary incontinence; neurogenic bladder; pruritus;

KW tumour; asthma; primer; ss.

XX

OS Rattus sp.

XX

PN WO2003106681-A2.

XX

PD 24-DEC-2003.

XX

PF 12-JUN-2003; 2003WO-EP006158.

XX

PR 14-JUN-2002; 2002DE-01026702.

XX

PA (CHEF) GRUENENTHAL GMBH.

XX

PI Altan O, Kurreck J, Grueneweller A, Erdmann V;

XX WPI; 2004-142780/14.

XX

XX New oligonucleotides directed against PIM1 kinase, useful for treating,

PT e.g. pain, urinary incontinence, tumors and inflammation, by gene

PT therapy.

XX

PS Disclosure; Fig 3; 37pp; German.

XX

CC This invention describes novel oligonucleotides or polynucleotide

CC constructs which are used in pharmaceutical or diagnostic compositions.

CC The oligonucleotides are used for identifying modulators of pain, based

CC on the ability of labelled oligonucleotides or polynucleotide constructs

CC to bind to an RNA. The oligonucleotides can also be used to diagnose

CC disease associated with altered expression of genes of the PIM kinase

CC family by measuring binding. The oligonucleotides have at least one

CC modified ribose, phosphodiester and/or base component. Particularly many,

CC of the nucleotides are 'locked nucleic acids' (LNA) or at least one

CC nucleotide is a phosphorothioate. The polynucleotide construct comprises

CC a ribozyme, DNA enzyme, vector (particularly for expression) or peptide

CC nucleic acid, most preferably a hammerhead ribozyme or Type 8-17 DNA

CC enzyme. It may be attached to a carrier (preferably the proteins tet,

CC transportin or ferritin) and/or encapsulated in a liposome. The products

CC of the invention have analgesic, uropathic, antipruritic, cytostatic,

CC antiinflammatory and antiasthmatic activity and can be used for antisense

CC and catalytic inhibition of PIM kinases and for antisense gene therapy.

CC The oligonucleotides are useful for treating (i) pain, especially

CC chronic, heat-induced or inflammatory pain, or tactile allodynia and (ii)

CC urinary incontinence, neurogenic bladder symptoms, pruritus, tumours and

CC inflammation, especially PIM1-kinase associated inflammation such as

CC asthma, or generally any PIM1-related disease symptoms. They can also be

CC used to screen for analgesic agents and for diagnosis of diseases

CC associated with expression of PIM family genes. AD126552-AD126627

CC represent antisense oligonucleotides described in the disclosure of the

CC invention.

XX

SQ Sequence 20 BP; 6 A; 6 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.5e+03;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1809 GTCCCTTGGGTCCTGCTCT 1828

DB 20 GTCCCTGGGGATCCTGCTCT 1

RESULT 1365

AD132188

ID AD132188 standard; DNA; 20 BP.

XX

AC AD132188;

XX

DT 22-APR-2004 (first entry)

XX

DE Murine H2K promoter PCR primer #2.

XX

KW antiapoptotic; Bcl-2; Raf; transgenic; anticancer; Bcl-x; Bcl-w; Bfl-1;

KW Brag-1; Mcl-1; A1; C-Raf; B-Raf; A-Raf; Sp-C promoter; HSK promoter;

KW cytostatic; cancer; PCR; primer; ss.

XX

OS Mus sp.

XX

PN WO2004001367-A2.

XX

PD 31-DEC-2003.

XX

PF 24-JUN-2003; 2003WO-DE002156.

XX

PR 24-JUN-2002; 2002DE-01028187.

XX

PA (MEDI-) MEDINNOVA GES MEDIZINISCHE INNOVATIONEN.

XX

PI Rapp UR, Sedlacek H;

XX

DR WPI; 2004-071776/07.
 XX Test system for detecting Bcl-2 and Raf family proteins, useful for
 PT diagnosis of cancer, or risk, and in screening for anticancer agents,
 FT also transgenic animals and cells for the test.
 XX
 XX Example 1; Page 13; 22pp; German.
 XX
 CC This invention describes a novel test system that contains agents
 CC required for determination of at least one antiapoptotic member of the
 CC Bcl-2 family and at least one member of the Raf family. The invention
 CC involves a transgenic non-human mammal, especially a rodent, whose cells,
 CC in a specific tissue, constitutively express Bcl-2 and Raf family
 CC members, isolated human or non-human cells that express Bcl-2 and Raf
 CC constitutively and a method of screening for potential anticancer agents.
 CC The agents are detection reagents specific for mRNA or protein of the Bcl
 CC -2 and Raf family and, in the case of mRNA, they provide specific
 CC amplification. Preferred agents for detecting proteins are antibodies.
 CC Specified antiapoptotic agents are Bcl-2, Bcl-x, Bcl-w, Bfl-1, Bcl-1,
 CC Mel-1 or Al, and specified Raf members are C-, B- or A-Raf. all
 CC optionally mutated. The transgenic animals contain genes for Bcl-2 and
 CC Raf under control of constitutive promoters, e.g. the SP-C promoter for
 CC Raf, to provide expression in the lungs, and the HSK promoter for Bcl-2.
 CC The products of the invention have cytostatic activity. The system is
 CC used (i) to diagnose cancer, or the risk of developing it, in humans or
 CC animals, or (ii) to screen for substances that, in cells that express
 CC both Bcl-2 members and Raf proteins, reduce expression or function of Bcl
 CC -2 members, i.e. are potentially useful for treatment or prevention of Bcl
 CC cancers. The method provides an early indication of the risk of
 CC developing cancer. This sequence represents a PCR primer used to make the
 CC transgenic mice used in the method of the invention.
 XX
 SQ Sequence 20 BP; 4 A; 11 C; 1 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1013 AGATCTCCCGCTCCGCTC 1032
 Db 1 ACATCTCCCGCATCCCACTC 20
 RESULT 1366
 ADI14052
 ID ADI14052 standard; DNA; 20 BP.
 XX
 AC ADI14052;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE Antisense DNA oligo to target human PTP1B DNA SeqID 305.
 XX
 KW human; ss; antisense; PTP1B; protein phosphatase 1B; PTPN1;
 KW phosphorothioate backbone; hyperproliferative condition; cancer;
 KW cytostatic; antidiabetic; anorectic; type 2 diabetes; obesity.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= phosphorothioate backbone"
 FT modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 2', methoxyethyl nucleotides. All cytidine
 FT nucleobases are 5' methylcytidine."
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER

FT /note= "OTHER= 2', methoxyethyl nucleotides. All cytidine
 FT nucleobases are 5' methylcytidine."
 XX US2003220282-A1.
 XX 27-NOV-2003.
 XX
 XX 07-FEB-2003; 2003US-00360510.
 XX
 XX 18-JAN-2000; 2000US-00487368.
 PR 31-JUL-2000; 2000US-00629644.
 PR 14-MAY-2001; 2001US-00854883.
 XX (ISIS-) ISIS PHARM INC.
 XX
 PI Bhanot S, Cowser LM, Wyatt JR, Monia BP, Butler MM, Mckay R;
 PI Freier SM;
 XX
 DR WPI; 2004-051719/05.
 XX
 PT New compounds, particularly antisense oligonucleotides targeted to a
 PT nucleic acid encoding PTP1B, useful for treating a disease/condition
 PT associated with PTP1B, such as cancer, diabetes or obesity.
 XX
 PS Claim 3; SEQ ID NO 305; 143pp; English.
 XX
 CC This invention relates to novel compositions and methods for modulating
 CC the expression of PTP1B (also known as protein phosphatase 1B and PTPN1).
 CC Specifically, it refers to antisense compounds that can target and
 CC hybridise with a nucleic acid molecule encoding PTP1B, as well as splice
 CC variants thereof and inhibit expression accordingly. PTP1B is a tyrosine
 CC phosphatase that plays an essential regulatory role in signalling
 CC mediated by the insulin receptor and as such is useful for treating
 CC diseases such as type 2 diabetes and obesity. Furthermore, PTP1B can
 CC suppress transformation of oncogenic genes, such that compositions of
 CC this invention can also be used to treat hyperproliferative conditions
 CC including cancer. Accordingly, these compounds can be described as having
 CC cytostatic, antidiabetic and anorectic activities. This oligonucleotide
 CC sequence is an antisense DNA oligo that targets human PTP1B DNA, and
 CC which has a phosphorothioate backbone and 2'-O-methoxyethyl wings, used
 CC in an exemplification of the invention.
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 416 TCATGGAAGGCTGTGTCGCC 435
 Db 1 TCATGGAAGGCTGTGTCGCC 20
 RESULT 1367
 ADH74843/c
 ID ADH74843 standard; DNA; 20 BP.
 XX
 AC ADH74843;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE Human Notch1 antisense oligonucleotide seq id 22.
 XX
 KW antisense compound; antisense technology; Notch1; cytostatic;
 KW immunosuppressive; gene therapy; developmental disorder;
 KW autoimmune disorder; hyperproliferative disorder; cancer; notch1;
 KW ss.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= b

PS Example 15; SEQ ID NO 74; 65pp; English.

XX The invention relates to a compound targeted to and which specifically
 CC hybridises with a nucleic acid molecule encoding KIAA1531 and inhibits
 CC the expression of KIAA1531. The compound, composition and methods are
 CC useful for treating a disease or condition associated with KIAA1531, such
 CC as a hyperproliferative disorder, e.g. cancer, a disease or condition
 CC involving hyperactivation of angiogenesis, or chronic inflammation. They
 CC are also useful in research and diagnostics for modulating the expression
 CC of KIAA1531. The present sequence represents a human KIAA1531 antisense
 CC oligonucleotide.

XX SQ Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.5e+03;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1610 AGTGCATCCACAGGACCTG 1629

DB 1 AGTTCACCCACAGGACCTG 20

RESULT 1370

ADJ46851/c

ID ADJ46851 standard; DNA; 20 BP.

XX AC ADJ46851;

XX DT 06-MAY-2004 (first entry)

XX DE Human KIAA1531 target sequence ISIS #125855.

XX KW human; KIAA1531; hyperproliferative disorder; cancer;
 XX angiogenesis hyperactivation; chronic inflammation; ss.

XX OS Homo sapiens.

XX PN US2004023378-A1.

XX PD 05-FEB-2004.

XX PF 31-JUL-2002; 2002US-00210290.

XX PR 31-JUL-2002; 2002US-00210290.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Chiang M, Marcussan EG, Dobie KW;

XX DR WPI; 2004-142659/14.

XX PT New compound, particularly an antisense oligonucleotide targeted to a
 XX nucleic acid encoding KIAA1531, useful for treating cancer, chronic
 XX inflammation or conditions involving hyperactivation of angiogenesis.

XX PS Example 15; SEQ ID NO 128; 65pp; English.

XX The invention relates to a compound targeted to and which specifically
 CC hybridises with a nucleic acid molecule encoding KIAA1531 and inhibits
 CC the expression of KIAA1531. The compound, composition and methods are
 CC useful for treating a disease or condition associated with KIAA1531, such
 CC as a hyperproliferative disorder, e.g. cancer, a disease or condition
 CC involving hyperactivation of angiogenesis, or chronic inflammation. They
 CC are also useful in research and diagnostics for modulating the expression
 CC of KIAA1531. The present sequence represents a human KIAA1531 target
 CC sequence.

XX SQ Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.5e+03;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1610 AGTGCATCCACAGGACCTG 1629

DB 20 AGTTCACCCACAGGACCTG 1

RESULT 1371

ADK97015/c

ID ADK97015 standard; DNA; 20 BP.

XX AC ADK97015;

XX DT 06-MAY-2004 (first entry)

XX DE Primer of the invention #2735.

XX KW human; single nucleotide polymorphism; SNP; ss; primer.

XX OS Synthetic.

XX PN JP2003259875-A.

XX PD 16-SEP-2003.

XX PF 08-MAR-2002; 2002JP-00064373.

XX PR 08-MAR-2002; 2002JP-00064373.

XX PA (KAGA-) KAGAKU GIUTSU SHINKO JIGYODAN.

XX DR WPI; 2004-093977/10.

XX PT Novel polynucleotide useful for PCR amplification along with two DNA
 XX fragment from another set of sequences, or for detecting single
 XX nucleotide polymorphism in human gene.

XX PS Claim 2; SEQ ID NO 6044; 2627pp; Japanese.

XX The present invention relates to a polynucleotide isolated from a human
 CC gene and is useful for detecting a single nucleotide polymorphism in a
 CC human gene or for diagnosing of disease. The invention enables the
 CC detection of a single nucleotide polymorphism in a human gene. The
 CC present sequence represents a primer of the invention.

XX SQ Sequence 20 BP; 0 A; 11 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.5e+03;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 175 GACGAAGACGGGAGGACGA 194

DB 20 GACGAAGACGGGAGGAGGA 1

RESULT 1372

ADK97839

ID ADK97839 standard; DNA; 20 BP.

XX AC ADK97839;

XX DT 06-MAY-2004 (first entry)

XX DE Primer of the invention #3559.

XX KW human; single nucleotide polymorphism; SNP; ss; primer.

XX OS Synthetic.

XX PN JP2003259875-A.

XX PD 16-SEP-2003.

XX


```
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT FT cytidine nucleobases are 5-methylcytidine."
XX
PN WO2004003201-A2.
XX
PD 08-JAN-2004.
XX
XX 01-JUL-2003; 2003WO-US020865.
XX
PR 01-JUL-2002; 2002US-0392813P.
XX
PA (PHAA ) PHARMACIA CORP.
XX
PI Kane CD;
XX
XX WPI; 2004-083058/08.
XX
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT related homologue-1 (LRH1), useful for treating breast cancer,
PT dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
XX Example 15; SEQ ID NO 1052; 909pp; English.
XX
XX This invention relates to novel antisense compounds useful for modulating
CC the expression of liver related homologue-1 (LRH1) and splice variants
CC thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC length that target a portion of an active site on the nucleic acid
CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC nuclear receptor protein that functions as a tissue specific
CC transcription factor. The present invention describes antisense
CC oligonucleotides that comprise at least one modified internucleoside
CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC methoxyethyl. These antisense compounds are useful for treating or
CC diagnosing a disease associated with LRH1, such as breast cancer,
CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC hepatitis, as well as hepatocellular carcinoma or a condition associated
CC with aromatase activity. Accordingly, these compositions exhibit
CC cytostatic, antilipidemic, antiarteriosclerotic, anorectic, hepatotropic,
CC litholytic, antiinflammatory and virucidal activities. This
CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC expression of the human LRH1 protein of the invention.
XX
SQ Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3558 CTGGACTGCTACCTTTCAA 3577
DB 1 CTGCACAGCTACCTTTTAA 20

RESULT 1377
ADJ21727/c
ID ADJ21727 standard; DNA; 20 BP.
XX
AC ADJ21727;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human endothelial lipase antisense oligonucleotide, SEQ ID 125.
XX
XX Antilipemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
KW Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL;
KW cardiovascular disorder; metabolic syndrome X; ss.
XX
XX Homo sapiens.
XX
```

```
OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 4 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX
PN WO2004009541-A2.
XX
XX 29-JAN-2004.
XX
XX 18-JUL-2003; 2003WO-US022410.
XX
XX 19-JUL-2002; 2002US-0397106P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Bhat BG;
XX
XX WPI; 2004-132912/13.
XX
XX New antisense oligonucleotide for modulating endothelial lipase
PT expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
PT high density lipoprotein or cardiovascular disorders.
XX
XX Claim 3; SEQ ID NO 125; 1007pp; English.
XX
XX The present invention relates to antisense oligonucleotides (ADJ21603-
CC ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
CC (ADJ25517), where the antisense oligonucleotide specifically hybridises
CC with and inhibits the expression of EL. The antisense oligonucleotides
CC are useful for modulating the expression of endothelial lipase in cells
CC or tissues to treat diseases associated with EL expression, such as
CC dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
CC disorder or metabolic syndrome X. In addition, the oligonucleotides are
CC used for diagnostics, prophylaxis, or as research reagents or kits.
XX
XX Sequence 20 BP; 2 A; 8 C; 8 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1842 GCTGGGGGCTCCCGTACC 1861
DB 20 GCTGGGGGAGCCCGTACC 1

RESULT 1378
ADL00873/c
ID ADL00873 standard; DNA; 20 BP.
XX
XX ADL00873;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human VEGF co-regulated chemokine-1' DNA antisense oligonucleotide #406.
XX
XX Human; VEGF co-regulated chemokine-1; VCC-1;
KW vascular endothelial growth factor; ss; antisense compound;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; antisense oligonucleotide; diabetes;
KW immunological disorder; cardiovascular injury; cancer; angiogenic disorder; haemangioma;
KW ischaemia; reperfusion injury; cancer; angiogenic disorder; psoriasis;
KW tumour angiogenesis; rheumatoid arthritis; atherosclerosis; bone fracture;
KW fibrosis; myocardial infarction; wound healing; organ regeneration;
KW cartilage damage; tissue regeneration; organ regeneration;
KW periodontal disease; gut regeneration; atrial fibrillation.
XX
```



```
XX DE Human ESM-1 antisense oligonucleotide seqid 1562.
XX AC
XX DT 01-JUL-2004 (first entry)
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:174.
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX KW ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
XX KW angiogenic disorder; immunological disorder; cardiovascular disorder;
XX KW neurological disorder; antisense technology; ss.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX PN WO2004021978-A2.
XX PD 18-MAR-2004.
XX PF 19-AUG-2003; 2003WO-US025833.
XX PR 19-AUG-2002; 2002US-0404495P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Weinstein EJ, Griggs DW;
XX PD WPI; 2004-248358/23.
XX DR
XX PT New antisense compound, having a sequence targeted to a nucleic acid
XX PT encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
XX PT composition for treating e.g., diabetes, cancer or cardiovascular
XX PT disorder.
XX PS Claim 3; SEQ ID NO 1562; 555pp; English.
XX CC The invention describes a new antisense compound, having a sequence
XX CC comprising 8-30 bp targeted to a nucleic acid encoding endothelial
XX CC specific molecule-1 (ESM-1), that specifically hybridises with the
XX CC nucleic acid ESM-1 and inhibits its expression. Also described are: a
XX CC composition; inhibiting the expression of ESM-1 in cells or tissues; and
XX CC treating an animal having a disease or condition associated with ESM-1.
XX CC The compound is useful for preparing a composition for treating diabetes,
XX CC cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
XX CC cardiovascular or neurological disorder. This sequence represents an
XX CC antisense oligonucleotide that can be used to modulate expression of
XX CC endothelial specific molecule-1 (ESM-1).
XX SQ Sequence 20 BP; 12 A; 0 C; 0 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 3461 TTTATATATATCTATATATA 3480
Db 20 TTTATATATTTTATAATA 1
RESULT 1381
ADM13987
ID ADM13987 standard; DNA; 20 BP.
```

```
XX AC ADM13987;
XX DT 01-JUL-2004 (first entry)
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:174.
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;
XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX KW reperfusion injury; ophthalmic disorder; immunological disorder;
XX KW cardiovascular disorder; neurological disorder; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX PN WO2004028458-A2.
XX PD 08-APR-2004.
XX PF 25-SEP-2003; 2003WO-US030374.
XX PR 25-SEP-2002; 2002US-0413549P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Gierse JK;
XX PD WPI; 2004-305094/28.
XX PT New antisense compound, having a sequence targeted to a nucleic acid
XX PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX PT ischemia.
XX PS Claim 4; SEQ ID NO 174; 132pp; English.
XX CC The present sequence represents a chimeric antisense oligonucleotide
XX CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX CC human mPGES-1 gene is located on chromosome 9, more specifically to
XX CC 9q34.3. The present invention also describes: (1) antisense compounds,
XX CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX CC inhibits its expression; (2) a method of inhibiting the expression of
XX CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX CC antisense oligonucleotides and antisense compounds have cytostatic,
XX CC antidiabetic, immunomodulator, cardiant, neuroprotective,
XX CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX CC ophthalmological, immunomodulatory and cardiovascular activities, and can
XX CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX CC can be used for preparing a composition for treating a disease or
XX CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
```

CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1612 TGCATCCACAGGACCTGGC 1631
 Db 1 TGCTTCACAGAACTGGC 20
 RESULT 1382
 ADM15219/C
 ID ADM15219 standard; DNA; 20 BP.
 XX ADM15219;
 XX 01-JUL-2004 (first entry)
 DT. Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1406.
 DE chimeric; antisense oligonucleotide; phosphorothioate; human;
 XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX Homo sapiens.
 OS Synthetic.
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX WO2004028458-A2.
 XX 08-APR-2004.
 XX 25-SEP-2003; 2003WO-US030374.
 XX 25-SEP-2002; 2002US-0413549P.
 XX (PHAA) PHARMACIA CORP.
 XX Gierse JK;
 XX WPI; 2004-305094/28.
 XX New antisense compound, having a sequence targeted to a nucleic acid
 encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 XX Claim 4; SEQ ID NO 1406; 132pp; English.
 XX The present sequence represents a chimeric antisense oligonucleotide

CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX SQ Sequence 20 BP; 8 A; 8 C; 3 G; 1 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2330 TGTGCGTGTGTGTGTGTG 2349
 Db 20 TGCCCGTGTGTGTGTGTG 1
 RESULT 1383
 ADM15163/C
 ID ADM15163 standard; DNA; 20 BP.
 XX ADM15163;
 XX 01-JUL-2004 (first entry)
 DT. Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1350.
 DE chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX Homo sapiens.
 OS Synthetic.
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX WO2004028458-A2.
 XX 08-APR-2004.
 XX 25-SEP-2003; 2003WO-US030374.

microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic; immunomodulatory; cardiant; neuroprotective; antiinflammatory; neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological; immunomodulatory; cardiovascular; gene therapy; inflammation; Alzheimer's disease; arthritis; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; ss.

Homo sapiens.

Synthetic.

Key Location/Qualifiers

modified_base 1..20

/*tag= b

/mod_base= OTHER

/note= "phosphorothioate linkages and all cytidine residues are 5-methylcytidines"

modified_base 1..5

/*tag= a

/mod_base= OTHER

/note= "2'-O-methoxyethyls"

modified_base 16..20

/*tag= c

/mod_base= OTHER

/note= "2'-O-methoxyethyls"

WO2004028458-A2.

08-APR-2004.

25-SEP-2003; 2003WO-US030374.

25-SEP-2002; 2002US-0413549P.

(PHAA) PHARMACIA CORP.

Gierse JK;

WPI; 2004-305094/28.

New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or ischemia.

Claim 4; SEQ ID NO 1641; 132pp; English.

The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 9q34.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. mPGES-1 chimeric antisense oligonucleotides and antisense compounds have cytostatic, antidiabetic, immunomodulatory, cardiant, neuroprotective, antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic, ophthalmological, immunomodulatory and cardiovascular activities, and can be used as mPGES-1 inhibitors and in gene therapy. The antisense compound can be used for preparing a composition for treating a disease or condition associated with mPGES-1 e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.

Sequence 20 BP; 10 A; 8 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. NO. 1.5e+03;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

2325 GTGTGTGCGTGTGTGT 2344

Db 20 GTGTGTGTGTGTGTGT 1

RESULT 1386

ADM15125/C

ID ADM15125 standard; DNA; 20 BP.

XX ADM15125;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1312.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;

XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

XX microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;

XX immunomodulatory; cardiant; neuroprotective; antiinflammatory;

XX neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;

XX immunomodulatory; cardiovascular; gene therapy; inflammation;

XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;

XX reperfusion injury; ophthalmic disorder; immunological disorder;

XX cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.

OS Synthetic.

Key Location/Qualifiers

modified_base 1..20

/*tag= b

/mod_base= OTHER

/note= "phosphorothioate linkages and all cytidine residues are 5-methylcytidines"

modified_base 1..5

/*tag= a

/mod_base= OTHER

/note= "2'-O-methoxyethyls"

modified_base 16..20

/*tag= c

/mod_base= OTHER

/note= "2'-O-methoxyethyls"

WO2004028458-A2.

08-APR-2004.

25-SEP-2003; 2003WO-US030374.

25-SEP-2002; 2002US-0413549P.

(PHAA) PHARMACIA CORP.

Gierse JK;

WPI; 2004-305094/28.

New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or ischemia.

Claim 4; SEQ ID NO 1312; 132pp; English.

The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 9q34.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. mPGES-1 chimeric antisense oligonucleotides and antisense compounds have cytostatic,

CC anti-diabetic, immunomodulator, cardiant, neuroprotective,
 CC anti-inflammatory, neuroprotective, neurotropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 2 A; 12 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2001 GCAGCTGGTGGAGGACCTGG 2020
 Db 20 GCAGTGGTGGAGGACCGG 1

RESULT 1387
 ADM15236/c
 ID ADM15236 standard; DNA; 20 BP.
 XX
 AC ADM15236;
 DT
 DT 01-JUL-2004 (first entry)
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1423.
 XX
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; anti-diabetic;
 KW immunomodulator; cardiant; neuroprotective; anti-inflammatory;
 KW neuroprotective; neurotropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.
 OS Synthetic.
 XX
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX
 PN WO2004028458-A2.
 XX
 XX
 PD 08-APR-2004.
 XX
 XX 25-SEP-2003; 2003WO-US030374.
 XX
 XX 25-SEP-2002; 2002US-0413549P.
 PR (PHAA) PHARMACIA CORP.
 XX
 PA Gierse JK;
 XX
 PI WPI; 2004-305094/28.
 XX
 DR New antisense compound, having a sequence targeted to a nucleic acid
 PT

PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 PS Claim 4; SEQ ID NO 1423; 132pp; English.
 XX
 CC The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC anti-diabetic, immunomodulator, cardiant, neuroprotective,
 CC anti-inflammatory, neuroprotective, neurotropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX

SQ Sequence 20 BP; 10 A; 8 C; 0 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2325 GTGTGTGTGGTGTGTGTGTGT 2344
 Db 20 GTGTGTGTGTGTGTGTGTGT 1

RESULT 1388
 ADM15212/c
 ID ADM15212 standard; DNA; 20 BP.

XX
 AC ADM15212;
 DT
 DT 01-JUL-2004 (first entry)
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1399.
 XX
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; anti-diabetic;
 KW immunomodulator; cardiant; neuroprotective; anti-inflammatory;
 KW neuroprotective; neurotropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.
 OS Synthetic.
 XX
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT

XX 01-JUL-2004 (first entry)
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1685.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX Homo sapiens.
XX Synthetic.
XX
XX Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX Claim 4; SEQ ID NO 1685; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytosstatic,
CC antiinflammatory, immunomodulator, cardiant, neuroprotective,
CC antidiabetic, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX

SQ Sequence 20 BP; 10 A; 8 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 2326 TGTGTGTGCGTGTGTGTGTG 2345
Db 20 TGTGTGTGTGTGTGTGTGTG 1
RESULT 1391
ADM14951/c
ID ADM14951 standard; DNA; 20 BP.
XX
XX ADM14951;
XX
XX 01-JUL-2004 (first entry)
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1138.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX Homo sapiens.
XX Synthetic.
XX
XX Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX Claim 4; SEQ ID NO 1138; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytosstatic,
CC antiinflammatory, immunomodulator, cardiant, neuroprotective,
CC antidiabetic, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX

9q34.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. mPGES-1 chimeric antisense oligonucleotides and antisense compounds have cytostatic, antiinflammatory, immunomodulatory, cardiant, neuroprotective, ophthalmological, immunomodulatory and cardiovascular activities, and can be used as mPGES-1 inhibitors and in gene therapy. The antisense compound can be used for preparing a composition for treating a disease or condition associated with mPGES-1 e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.

Sequence 20 BP; 6 A; 9 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2361 GTGTGCTGTGTGCTGCGC 2380
Db 20 GTGGGCTGTGTGTGCTGCC 1

RESULT 1392

ADM15453/C

ID ADM15453 standard; DNA; 20 BP.

XX AC ADM15453;

DT 01-JUL-2004 (first entry)

DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1640.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;

KW microsomal prostaglandin E2 synthase; mPGES-1 inhibitor;

KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;

KW immunomodulator; cardiant; neuroprotective; antiinflammatory;

KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;

KW immunomodulatory; cardiovascular; gene therapy; inflammation;

KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;

KW reperfusion injury; ophthalmic disorder; immunological disorder;

KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine

FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT WO2004028458-A2.

PN 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

PR

XX

PA (PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

DR New antisense compound, having a sequence targeted to a nucleic acid

XX encoding mPGES-1, useful for preparing a composition for treating e.g.,

PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or

PT ischaemia.

XX Claim 4; SEQ ID NO 1640; 132pp; English.

PS The present sequence represents a chimeric antisense oligonucleotide

XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The

CC human mPGES-1 gene is located on chromosome 9, more specifically to

CC 9q34.3. The present invention also describes: (1) antisense compounds,

CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding

CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and

CC inhibits its expression; (2) a method of inhibiting the expression of

CC mPGES-1 in cells or tissues; and (3) a method of treating an animal

CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric

CC antisense oligonucleotides and antisense compounds have cytostatic,

CC antidiabetic, immunomodulatory, cardiant, neuroprotective,

CC antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,

CC ophthalmological, immunomodulatory and cardiovascular activities, and can

CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound

CC can be used for preparing a composition for treating a disease or

CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's

CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or

CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 10 A; 8 C; 0 G; 2 T; 0 U; 0 Other;

SQ Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.5e+03;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2325 GTGTGTGTCGTGTGTGTGT 2344

Db 20 GTGTGTGTGTGTGTGTGT 1

RESULT 1393

ADM15440/C

ID ADM15440 standard; DNA; 20 BP.

XX AC ADM15440;

XX 01-JUL-2004 (first entry)

DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1627.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;

KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;

KW immunomodulator; cardiant; neuroprotective; antiinflammatory;

KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;

KW immunomodulatory; cardiovascular; gene therapy; inflammation;

KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;

KW reperfusion injury; ophthalmic disorder; immunological disorder;

KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine

FT residues are 5-methylcytidines"

FT modified_base 1..5

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FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"
FT      modified_base
FT      16..20
FT      /*tag= c
FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"
XX
PN      WO2004028458-A2.
XX
PD      08-APR-2004.
XX
PP      25-SEP-2003; 2003WO-US030374.
XX
PR      25-SEP-2002; 2002US-0413549P.
XX
PA      (PHAA ) PHARMACIA CORP.
XX
PI      Gierse JK;
XX
XX      WPI; 2004-305094/28.
DR      New antisense compound, having a sequence targeted to a nucleic acid
XX      encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX      inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX      ischemia.
XX
PS      Claim 4; SEQ ID NO 1627; 132pp; English.
XX
CC      The present sequence represents a chimeric antisense oligonucleotide
CC      targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC      human mPGES-1 gene is located on chromosome 9, more specifically to
CC      9q34.3. The present invention also describes: (1) antisense compounds,
CC      having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC      mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC      inhibits its expression; (2) a method of inhibiting the expression of
CC      mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC      having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC      antisense oligonucleotides and antisense compounds have cytostatic,
CC      antidiabetic, immunomodulatory, cardiant, neuroprotective,
CC      antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
CC      ophthalmological, immunomodulatory and cardiovascular activities, and can
CC      be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC      can be used for preparing a composition for treating a disease or
CC      condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC      disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC      ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ      Sequence 20 BP; 10 A; 8 C; 0 G; 2 T; 0 U; 0 Other;

Query Match      0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      2326 TGTGTGCGTGTGTGTGTG 2345
DB      ||||| ||||| |||||
        20 TGTGTGTGTGTGTGTGTG 1

RESULT 1394
ADM15483/C
ID      ADM15483 standard; DNA; 20 BP.
XX
XX      ADM15483;
AC
XX
DT      01-JUL-2004 (first entry)
XX
DE      Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1670.
XX
XX      chimeric; antisense oligonucleotide; phosphorothioate; human;
KW      microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW      microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW      immunomodulator; cardiant; neuroprotective; antiinflammatory;

neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
immunomodulatory; cardiovascular; arthritis; diabetes; cancer; ischaemia;
reperfusion injury; ophthalmic disorder; immunological disorder; ss.
Homo sapiens.
Synthetic.
XX
XX      Key
XX      modified_base
XX      1..20
XX      /*tag= b
XX      /mod_base= OTHER
XX      /note= "phosphorothioate linkages and all cytidine
XX      residues are 5-methylcytidines"
XX      modified_base
XX      1..5
XX      /*tag= a
XX      /mod_base= OTHER
XX      /note= "2'-O-methoxyethyls"
XX      modified_base
XX      16..20
XX      /*tag= c
XX      /mod_base= OTHER
XX      /note= "2'-O-methoxyethyls"
XX
PN      WO2004028458-A2.
XX
XX      08-APR-2004.
XX
XX      25-SEP-2003; 2003WO-US030374.
XX
XX      25-SEP-2002; 2002US-0413549P.
XX
XX      (PHAA ) PHARMACIA CORP.
XX
XX      Gierse JK;
XX
XX      WPI; 2004-305094/28.
DR      New antisense compound, having a sequence targeted to a nucleic acid
XX      encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX      inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX      ischemia.
XX
PS      Claim 4; SEQ ID NO 1670; 132pp; English.
XX
CC      The present sequence represents a chimeric antisense oligonucleotide
CC      targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC      human mPGES-1 gene is located on chromosome 9, more specifically to
CC      9q34.3. The present invention also describes: (1) antisense compounds,
CC      having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC      mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC      inhibits its expression; (2) a method of inhibiting the expression of
CC      mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC      having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC      antisense oligonucleotides and antisense compounds have cytostatic,
CC      antidiabetic, immunomodulatory, cardiant, neuroprotective,
CC      antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
CC      ophthalmological, immunomodulatory and cardiovascular activities, and can
CC      be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC      can be used for preparing a composition for treating a disease or
CC      condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC      disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC      ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ      Sequence 20 BP; 11 A; 7 C; 2 G; 0 T; 0 U; 0 Other;

Query Match      0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      2335 GTGTGTGTGTGTGTGTGCAC 2354
DB      ||||| ||||| |||||
        20 GTGTGTGTGTGTGTGTTC 1

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RESULT 1395
ID ADM14988/c
XX ADM14988 standard; DNA; 20 BP.
XX AC ADM14988;
XX DT 01-JUL-2004 (first entry)
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1175.
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;
XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX KW reperfusion injury; ophthalmic disorder; immunological disorder;
XX KW cardiovascular disorder; neurological disorder; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20 /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkages and all cytidine
XX FT residues are 5-methylcytidines"
XX FT modified_base 1..5 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls"
XX FT modified_base 16..20 /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls"
XX PN WO2004028458-A2.
XX PD 08-APR-2004.
XX PF 25-SEP-2003; 2003WO-US030374.
XX PR 25-SEP-2002; 2002US-0413549P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Gierse JK;
XX DR WPI; 2004-305094/28.
XX PT New antisense compound, having a sequence targeted to a nucleic acid
XX PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX PT ischaemia.
XX PS Claim 4; SEQ ID NO 1175; 132pp; English.
XX CC The present sequence represents a chimeric antisense oligonucleotide
XX CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX CC human mPGES-1 gene is located on chromosome 9, more specifically to
XX CC 9q34.3. The present invention also describes: (1) antisense compounds,
XX CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX CC inhibits its expression; (2) a method of inhibiting the expression of
XX CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX CC antisense oligonucleotides and antisense compounds have cytostatic,
XX CC antidiabetic, immunomodulator, cardiant, neuroprotective,
XX CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,

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CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX SX Sequence 20 BP; 8 A; 8 C; 3 G; 1 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 2327 GTGTGCGCGTGTGTGTGTGTGT 2346
| | | | | | | | | | | | | | | |
Db 20 GTGTGCGCGTGTGTGTGTGTAT 1
RESULT 1396
ADM15478/c
ID ADM15478 standard; DNA; 20 BP.
XX AC ADM15478;
XX DT 01-JUL-2004 (first entry)
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1665.
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;
XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX KW reperfusion injury; ophthalmic disorder; immunological disorder;
XX KW cardiovascular disorder; neurological disorder; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20 /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkages and all cytidine
XX FT residues are 5-methylcytidines"
XX FT modified_base 1..5 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls"
XX FT modified_base 16..20 /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls"
XX PN WO2004028458-A2.
XX PD 08-APR-2004.
XX PF 25-SEP-2003; 2003WO-US030374.
XX PR 25-SEP-2002; 2002US-0413549P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Gierse JK;
XX DR WPI; 2004-305094/28.
XX PT New antisense compound, having a sequence targeted to a nucleic acid
XX PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or

```

PT ischemia.

PS Claim 4; SEQ ID NO 1665; 132pp; English.

XX

XX The present sequence represents a chimeric antisense oligonucleotide

XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The

XX human mPGES-1 gene is located on chromosome 9, more specifically to

XX 9q34.3. The present invention also describes: (1) antisense compounds,

XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding

XX mPGES-1, which specifically hybridize with the nucleic acid mPGES-1 and

XX inhibits its expression; (2) a method of inhibiting the expression of

XX mPGES-1 in cells or tissues; and (3) a method of treating an animal

XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric

XX antisense oligonucleotides and antisense compounds have cytostatic,

XX antiinflammatory, neuroprotective, cardiant, neuroprotective,

XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,

XX ophthalmological, immunomodulatory and cardiovascular activities, and can

XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound

XX can be used for preparing a composition for treating a disease or

XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's

XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or

XX ophthalmic, immunological, cardiovascular or neurological disorder.

SQ Sequence 20 BP; 10 A; 8 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.5e+03;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2319 GTGTGTGTGTGTGTGTGTGT 2338

DB 20 GTGTGTGTGTGTGTGTGTGT 1

RESULT 1397

ADM15318/c

ID ADM15318 standard; DNA; 20 BP.

XX

XX ADM15318;

XX

XX 01-JUL-2004 (first entry)

XX

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1505.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;

XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

XX microsomal prostaglandin E2 synthase inhibitor; cytostatic; antiidiabetic;

XX immunomodulator; cardiant; neuroprotective; antiinflammatory;

XX neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;

XX immunomodulatory; cardiovascular; gene therapy; inflammation;

XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;

XX reperfusion injury; ophthalmic disorder; immunological disorder;

XX cardiovascular disorder; neurological disorder; ss.

XX

OS Homo sapiens.

OS Synthetic.

XX

XX Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine

FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX

PN WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX

PR 25-SEP-2002; 2002US-0413549P.

XX

PA (PHAA) PHARMACIA CORP.

XX

PI Gierse JK;

XX

DR WPI; 2004-305094/28.

XX

XX New antisense compound, having a sequence targeted to a nucleic acid

PT encoding mPGES-1, useful for preparing a composition for treating e.g.,

PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or

PT ischemia.

XX

PS Claim 4; SEQ ID NO 1505; 132pp; English.

XX

XX The present sequence represents a chimeric antisense oligonucleotide

CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The

CC human mPGES-1 gene is located on chromosome 9, more specifically to

CC 9q34.3. The present invention also describes: (1) antisense compounds,

CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding

CC mPGES-1, which specifically hybridize with the nucleic acid mPGES-1 and

CC inhibits its expression; (2) a method of inhibiting the expression of

CC mPGES-1 in cells or tissues; and (3) a method of treating an animal

CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric

CC antisense oligonucleotides and antisense compounds have cytostatic,

CC antiidiabetic, immunomodulator, cardiant, neuroprotective,

CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,

CC ophthalmological, immunomodulatory and cardiovascular activities, and can

CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound

CC can be used for preparing a composition for treating a disease or

CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's

CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or

CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX

SQ Sequence 20 BP; 10 A; 8 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.5e+03;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2326 TGTGTGTGTGTGTGTGTGTGT 2345

DB 20 TGTGTGTGTGTGTGTGTGTGT 1

RESULT 1398

ADM15244/c

ID ADM15244 standard; DNA; 20 BP.

XX

XX ADM15244;

XX

XX 01-JUL-2004 (first entry)

XX

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1431.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;

XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

XX microsomal prostaglandin E2 synthase inhibitor; cytostatic; antiidiabetic;

XX immunomodulator; cardiant; neuroprotective; antiinflammatory;

XX neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;

XX immunomodulatory; cardiovascular; gene therapy; inflammation;

XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;

XX reperfusion injury; ophthalmic disorder; immunological disorder;

XX cardiovascular disorder; neurological disorder; ss.

XX

OS Homo sapiens.

OS Synthetic.

XX

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2326 TGTGTGTCGTGTGTGTG 2345
DB 20 TGTGTATGTGTGTGTGTG 1

RESULT 1400

ADO21421
ID ADO21421 standard; DNA; 20 BP.
XX
AC ADO21421;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human fatty acid synthase, antisense oligonucleotide #126.
XX
KW ss; fatty acid synthase; antisense therapy; metabolic rate; adiposity;
KW serum leptin; serum cholesterol; blood glucose; serum insulin;
KW serum lipid; breast cancer; prostate cancer; colon cancer;
KW endometrium cancer; ovary cancer; thyroid cancer; infection;
KW inflammation; tumour; probe; human.
XX
OS Homo sapiens.
XX
PH US2004077570-A1.
XX
PN 22-APR-2004.
XX
PD 17-OCT-2002; 2002US-00274085.
XX
PF 17-OCT-2002; 2002US-00274085.
XX
PR 17-OCT-2002; 2002US-00274085.
XX
PA (PREI/) FREIER S M.
PA (DOBI/) DOBIE K W.
PA (BHAN/) BHANOT S.
XX
PI Freier SM, Dobie KW, Bhanot S;
XX WPI; 2004-340035/31.
XX
PT New compound of 8-80 nucleobases in length which inhibits the expression
PT of fatty acid synthase, useful for treating disease or condition
PT associated with fatty acid synthase such as breast and colon cancers.
XX
PS Example 16; SEQ ID NO 145; 87pp; English.

XX The invention relates to antisense oligonucleotides targeted to a nucleic
XX acid molecule encoding fatty acid synthase, which inhibit the expression
XX of fatty acid synthase. The antisense oligonucleotides are useful for
XX increasing the metabolic rate, decreasing adiposity, decreasing serum
XX leptin, decreasing serum cholesterol, decreasing blood glucose,
XX decreasing serum insulin, decreasing serum lipids and treating an animal
XX having a disease or condition associated with fatty acid synthase, such
XX as breast, prostate, colon, endometrium, ovary and thyroid cancers. It
XX may also be useful prophylactically, e.g., to prevent or delay infection,
XX inflammation or tumour formation. The present sequence represents a human
XX fatty acid synthase antisense oligonucleotide.

XX Sequence 20 BP; 1 A; 8 C; 7 G; 4 T; 0 U; 0 Other;
SQ

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3628 GCCTGAGTCTGGGACGCTG 3647
DB 1 GCCTCTAGTCTGGGCTCCG 20

RESULT 1401

ADO21340/c
ID ADO21340 standard; DNA; 20 BP.
XX
AC ADO21340;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human fatty acid synthase, antisense oligonucleotide #45.
XX
KW ss; fatty acid synthase; antisense therapy; metabolic rate; adiposity;
KW serum leptin; serum cholesterol; blood glucose; serum insulin;
KW serum lipid; breast cancer; prostate cancer; colon cancer;
KW endometrium cancer; ovary cancer; thyroid cancer; infection;
KW inflammation; tumour; probe; human.
XX
OS Homo sapiens.
XX
PH US2004077570-A1.
XX
PN 22-APR-2004.
XX
PD 17-OCT-2002; 2002US-00274085.
XX
PF 17-OCT-2002; 2002US-00274085.
XX
PR 17-OCT-2002; 2002US-00274085.
XX
PA (PREI/) FREIER S M.
PA (DOBI/) DOBIE K W.
PA (BHAN/) BHANOT S.
XX
PI Freier SM, Dobie KW, Bhanot S;
XX WPI; 2004-340035/31.
XX
PT New compound of 8-80 nucleobases in length which inhibits the expression
PT of fatty acid synthase, useful for treating disease or condition
PT associated with fatty acid synthase such as breast and colon cancers.
XX
PS Example 15; SEQ ID NO 64; 87pp; English.

XX The invention relates to antisense oligonucleotides targeted to a nucleic
XX acid molecule encoding fatty acid synthase, which inhibit the expression
XX of fatty acid synthase. The antisense oligonucleotides are useful for
XX increasing the metabolic rate, decreasing adiposity, decreasing serum
XX leptin, decreasing serum cholesterol, decreasing blood glucose,
XX decreasing serum insulin, decreasing serum lipids and treating an animal
XX having a disease or condition associated with fatty acid synthase, such
XX as breast, prostate, colon, endometrium, ovary and thyroid cancers. It
XX may also be useful prophylactically, e.g., to prevent or delay infection,
XX inflammation or tumour formation. The present sequence represents a human
XX fatty acid synthase antisense oligonucleotide.

XX Sequence 20 BP; 1 A; 8 C; 7 G; 4 T; 0 U; 0 Other;
SQ

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3628 GCCTGAGTCTGGGACGCTG 3647
DB 1 GCCTCTAGTCTGGGCTCCG 20

ADO21340/c
ID ADO21340 standard; DNA; 20 BP.
XX
AC ADO21340;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human fatty acid synthase, antisense oligonucleotide #45.
XX
KW ss; fatty acid synthase; antisense therapy; metabolic rate; adiposity;
KW serum leptin; serum cholesterol; blood glucose; serum insulin;
KW serum lipid; breast cancer; prostate cancer; colon cancer;
KW endometrium cancer; ovary cancer; thyroid cancer; infection;
KW inflammation; tumour; probe; human.
XX
OS Homo sapiens.
XX
PH US2004077570-A1.
XX
PN 22-APR-2004.
XX
PD 17-OCT-2002; 2002US-00274085.
XX
PF 17-OCT-2002; 2002US-00274085.
XX
PR 17-OCT-2002; 2002US-00274085.
XX
PA (PREI/) FREIER S M.
PA (DOBI/) DOBIE K W.
PA (BHAN/) BHANOT S.
XX
PI Freier SM, Dobie KW, Bhanot S;
XX WPI; 2004-340035/31.
XX
PT New compound of 8-80 nucleobases in length which inhibits the expression
PT of fatty acid synthase, useful for treating disease or condition
PT associated with fatty acid synthase such as breast and colon cancers.
XX
PS Example 15; SEQ ID NO 64; 87pp; English.

XX The invention relates to antisense oligonucleotides targeted to a nucleic
XX acid molecule encoding fatty acid synthase, which inhibit the expression
XX of fatty acid synthase. The antisense oligonucleotides are useful for
XX increasing the metabolic rate, decreasing adiposity, decreasing serum
XX leptin, decreasing serum cholesterol, decreasing blood glucose,
XX decreasing serum insulin, decreasing serum lipids and treating an animal
XX having a disease or condition associated with fatty acid synthase, such
XX as breast, prostate, colon, endometrium, ovary and thyroid cancers. It
XX may also be useful prophylactically, e.g., to prevent or delay infection,
XX inflammation or tumour formation. The present sequence represents a human
XX fatty acid synthase antisense oligonucleotide.

XX Sequence 20 BP; 3 A; 8 C; 7 G; 2 T; 0 U; 0 Other;
SQ

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1891 CTGCTGAAGGAGGCCACCG 1910

```
Db          ||||| || ||||| |||
20 CTGCTGAGCAGGCGCTCCG 1

RESULT 1402
ADO21448
ID ADO21448 standard; DNA; 20 BP.
XX
AC ADO21448;
XX
DT 15-JUL-2004 (first entry)
DE
XX
XX Human fatty acid synthase, antisense oligonucleotide #153.
XX
XX ss; fatty acid synthase; antisense therapy; metabolic rate; adiposity;
KW serum leptin; serum cholesterol; blood glucose; serum insulin;
KW serum lipid; breast cancer; prostate cancer; colon cancer;
KW endometrium cancer; ovary cancer; thyroid cancer; infection;
KW inflammation; tumour; probe; human.
XX
OS Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= Other
XX /note= "Phosphorothioate backbone. All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= Other
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= Other
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004077570-A1.
XX
XX 22-APR-2004.
XX
XX 17-OCT-2002; 2002US-00274085.
XX
XX 17-OCT-2002; 2002US-00274085.
XX
XX (FREI/) FREIER S M.
XX (DOBI/) DOBIE K W.
XX (BHAN/) BHANOT S.
XX
XX Freier SM, Dobie KW, Bhanot S;
XX WPI; 2004-340035/31.
XX
XX New compound of 8-80 nucleobases in length which inhibits the expression
XX of fatty acid synthase, useful for treating disease or condition
XX associated with fatty acid synthase such as breast and colon cancers.
XX
XX Example 16; SEQ ID NO 172; 87pp; English.
XX
XX The invention relates to antisense oligonucleotides targeted to a nucleic
XX acid molecule encoding fatty acid synthase, which inhibit the expression
XX of fatty acid synthase. The antisense oligonucleotides are useful for
XX increasing the metabolic rate, decreasing adiposity, decreasing serum
XX leptin, decreasing serum cholesterol, decreasing blood glucose,
XX decreasing serum insulin, decreasing serum lipids and treating an animal
XX having a disease or condition associated with fatty acid synthase, such
XX as breast, prostate, colon, endometrium, ovary and thyroid cancers. It
XX may also be useful prophylactically, e.g., to prevent or delay infection,
XX inflammation or tumour formation. The present sequence represents a human
XX fatty acid synthase antisense oligonucleotide.
XX
XX Sequence 20 BP; 2 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1891 CTGCTGAAGGAGGCGCCACCG 1910
XX ||||| ||||| ||||| |||||
XX 1 CTGCTGAGCAGGCGCTCCG 20
XX
XX RESULT 1403
XX ADO21309/c
XX ID ADO21309 standard; DNA; 20 BP.
XX
XX AC ADO21309;
XX
XX Db          ||||| ||||| ||||| |||||
20 GCCTCAGTCTGGGCTGCG 1

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 3628 GCCTCAGTCTGGGCTGCG 3647
Db 20 GCCTCAGTCTGGGCTGCG 1

RESULT 1404
```


PI Lee YU, Park HO, Park JY, Won MS, Yoo HS, Yoo SJ;
 DR WPI; 2004-199754/19.
 XX
 XX Method for screening drugs using systematic deletion mutant of fission
 PT yeast.
 XX
 PS Example 2; SEQ ID NO 10; 28pp; Korean.
 CC
 CC The invention relates to a method for screening drugs using systematic
 CC deletion mutants of fission yeast (Schizosaccharomyces pombe). The
 CC deletion mutants exhibit a sensitive response to drugs and are created by
 CC deletion of a target gene selected from nda2, pspl, pak1, crmi, ste7,
 CC ste11, dis3, dis2, rad16, rad24, chk1, cdc1 and cdc25. Target gene
 CC deletion is achieved by homologous recombination with a target gene
 CC deletion cassette comprising a marker gene (e.g., an antibiotic marker or
 CC auxotrophic marker gene), tag sequences, binding sites for universal
 CC primers, a restriction site, and target gene-specific sequences,
 CC preferably those encoding N- and C-terminal sequences of the encoded
 CC protein. Sequences ADP70154-ADP70181 represent tag sequences used in the
 CC construction of target gene deletion cassettes.
 XX
 SQ Sequence 20 BP; 3 A; 11 C; 2 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 875 ACGAGGGCGGCGAGTGTAT 894
 DB 20 ACGAGGGCGGCGAGTGTAT 1
 RESULT 1407
 ADP76289
 ID ADP76289 standard; DNA; 20 BP.
 XX
 AC ADP76289;
 XX
 DT 12-AUG-2004 (first entry)
 XX
 DE Chimeric phosphorothioate oligonucleotide #88.
 XX
 KW GPAT; Antidiabetic; Cardiant;
 KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
 KW reperfusion; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..4
 FT /*tag= a
 FT /mod_base= other
 FT /note= "2-methoxyethyl wing"
 FT modified_base 17..20
 FT /*tag= b
 FT /mod_base= other
 FT /note= "2-methoxyethyl wing"
 FT
 FT
 XX WO2004035763-A2.
 PN
 XX
 PD 29-APR-2004.
 XX
 XX
 PF 02-OCT-2003; 2003WO-US033332.
 XX
 XX
 PR 17-OCT-2002; 2002US-0419268P.
 XX
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Broschat KO, Crosby SD;
 XX WPI; 2004-348453/32.
 DR
 XX
 XX

PT New compounds, particularly antisense oligonucleotides targeted to a
 PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
 PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
 PT ischemia/reperfusion injury.
 XX
 PS Claim 4; SEQ ID NO 88; 175pp; English.
 XX
 CC The present invention relates to a compound which specifically hybridizes
 CC with a nucleic acid molecule encoding GFAT, and inhibits the expression
 CC of GFAT. Specifically claimed are antisense oligonucleotides capable of
 CC modulating the expression of GFAT, and which comprise any of the 3063
 CC sequences of 20 base pairs, given in the specification. The compound,
 CC composition and methods are useful for treating a disease or condition
 CC associated with GFAT, such as a disease or condition, e.g. diabetes, a
 CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
 CC They are also useful in research and diagnostics for modulating the
 CC expression of GFAT. The present sequence represents a chimeric
 CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
 CC oligonucleotides inhibit human GFAT expression.
 XX
 SQ Sequence 20 BP; 4 A; 2 C; 6 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3238 AGTTGGAGTGATTCACGTG 3257
 DB 1 AGTTGGATGATTCATTG 20
 RESULT 1408
 ADP76303
 ID ADP76303 standard; DNA; 20 BP.
 XX
 AC ADP76303;
 XX
 DT 12-AUG-2004 (first entry)
 XX
 DE Chimeric phosphorothioate oligonucleotide #102.
 XX
 KW GFAT; Antidiabetic; Cardiant;
 KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
 KW reperfusion; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..4
 FT /*tag= a
 FT /mod_base= other
 FT /note= "2-methoxyethyl wing"
 FT modified_base 17..20
 FT /*tag= b
 FT /mod_base= other
 FT /note= "2-methoxyethyl wing"
 FT
 FT
 XX WO2004035763-A2.
 PN
 XX
 PD 29-APR-2004.
 XX
 XX
 PF 02-OCT-2003; 2003WO-US033332.
 XX
 XX
 PR 17-OCT-2002; 2002US-0419268P.
 XX
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Broschat KO, Crosby SD;
 XX WPI; 2004-348453/32.
 DR
 XX
 XX New compounds, particularly antisense oligonucleotides targeted to a
 PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase

PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
 XX ischemia/reperfusion injury.
 XX
 PS Claim 4; SEQ ID NO 102; 175pp; English.
 XX
 CC The present invention relates to a compound which specifically hybridizes
 CC with a nucleic acid molecule encoding GFAT, and inhibits the expression
 CC of GFAT. Specifically claimed are antisense oligonucleotides capable of
 CC modulating the expression of GFAT, and which comprise any of the 3063
 CC sequences of 20 base pairs, given in the specification. The compound,
 CC composition and methods are useful for treating a disease or condition
 CC associated with GFAT, such as a disease or condition, e.g. diabetes, a
 CC cardiovascular or neurological disorder, ischemia/reperfusion injury.
 CC They are also useful in research and diagnostics for modulating the
 CC expression of GFAT. The present sequence represents a chimeric
 CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
 CC oligonucleotides inhibit human GFAT expression.
 XX
 XX Sequence 20 BP; 4 A; 2 C; 5 G; 9 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3237 TAGTGGAGGTGATTCAGT 3256
 DB 1 TAGTGGTGTGATTCATT 20
 RESULT 1409
 ID ADO32937 standard; DNA; 20 BP.
 XX
 AC ADO32937;
 XX
 DT 12-AUG-2004 (first entry)
 XX
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 385.
 XX
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
 KW antilipemic; antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
 FT methylcytidines"
 XX
 PN WO2004044181-A2.
 XX
 PD 27-MAY-2004.
 XX
 PF 13-NOV-2003; 2003WO-US036411.
 XX
 PR 13-NOV-2002; 2002US-0426234P.
 PR 15-MAY-2003; 2003WO-US015493.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
 XX

XX WPI; 2004-420321/39.
 XX
 PT Antisense oligonucleotide compound that inhibits expression of mRNA
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
 PT syndrome.
 XX
 PS Example 33; SEQ ID NO 385; 483pp; English.
 XX
 CC The invention relates to a novel antisense compound where the compound
 CC hybridizes to and inhibits expression of mRNA encoding human
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The
 CC compound of the invention demonstrates cardiovascular,
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiatic,
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may
 CC be useful for inhibiting the expression of apolipoprotein B in cells or
 CC tissues in vivo in order to address a condition associated with abnormal
 CC lipid or cholesterol metabolism. The compound may be useful for
 CC decreasing circulating lipoprotein levels, triglyceride levels,
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase
 CC reactants and chylomicrons and thus may be utilised during treatment of
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
 CC targeted to human ApoB RNA.
 XX
 XX Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.5e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2567 ACCACGGGACATCACAGGTT 2586
 DB 1 ACCACTGACATCACAGGTT 20
 RESULT 1410
 ID ADO8405/c
 ID ADP08405 standard; DNA; 20 BP.
 XX
 AC ADP08405;
 XX
 DT 26-AUG-2004 (first entry)
 XX
 DE PCR primer 1 used to genotype human laminin alpha 4 polymorphism.
 XX
 KW breast cancer; cytostatic; gene therapy; human; laminin alpha 4; LAMA4;
 KW chromosome 6q21; ss; PCR; primer; SNP; single nucleotide polymorphism.
 XX
 OS Homo sapiens.
 XX
 PN WO2004047767-A2.
 XX
 PD 10-JUN-2004.
 XX
 PF 25-NOV-2003; 2003WO-US037966.
 XX
 PR 25-NOV-2002; 2002US-0429136P.
 PR 24-JUL-2003; 2003US-0490234P.
 XX
 PA (SEQU-) SEQUENOM INC.
 XX
 PI Roth RB, Nelson MR, Braun A, Kammerer SM, Reneland R;
 XX
 XX WPI; 2004-441082/41.
 DR

```

XX Identifying a subject at risk of breast cancer by detecting the presence
PT or absence of one or more nucleotide polymorphic variations, useful for
PT diagnosing, preventing and/or treating breast cancer.
XX
XX Example 2; Page 73; 286pp; English.
XX
XX The invention relates to a novel method for identifying a subject at risk
CC of breast cancer which comprises detecting the presence or absence of one
CC or more polymorphic variations associated with breast cancer in a nucleic
CC acid sample from a subject. The method of the invention has cytostatic
CC applications and may be useful for identifying a risk of breast cancer,
CC as well as therapeutic and prophylactic treatments that specifically
CC target breast cancer, such as gene therapy. The current sequence is that
CC of a PCR primer of the invention which was used to genotype single
CC nucleotide polymorphisms within human laminin alpha 4 (LAMA4) DNA which
CC is located at chromosomal position 6q21.
XX
XX Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 374 GCATTGGAGGCATCAAGCTG 393
DB 20 GCATTGTAGTCATCCAGCTG 1
RESULT 1411
ADP66864/c
ID ADP66864 standard; DNA; 20 BP.
XX
XX ADP66864;
XX
XX 09-SEP-2004 (first entry)
XX
XX Mouse endothelial lipase antisense oligonucleotide seqid 120.
DE
DE antisense therapy; endothelial lipase;
KW endothelial lipase associated disorder; cardiovascular disease; mouse;
KW antisense oligonucleotide; antisense technology; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004115653-A1.
XX
XX 17-JUN-2004.
XX
XX 12-DEC-2002; 2002US-00319915.
XX
XX 12-DEC-2002; 2002US-00319915.
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
XX
XX WPI; 2004-449390/42.
XX

```

```

XX New antisense oligonucleotides for modulating endothelial lipase
PT expression, useful for diagnosing, preventing or treating diseases
PT associated with aberrant endothelial lipase expression, e.g.
PT cardiovascular disease.
XX
XX Example 16; SEQ ID NO 120; 114pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted to
CC a nucleic acid molecule encoding endothelial lipase. The compound
CC specifically hybridizes with the nucleic acid molecule encoding
CC endothelial lipase (which comprises a sequence of 3927 bp fully defined
CC in the specification) and inhibits the expression of endothelial lipase.
CC Also described are: inhibiting the expression of endothelial lipase in
CC cells or tissues; screening for a modulator of endothelial lipase; a
CC diagnostic method for identifying a disease state; a kit or assay device
CC comprising the above compound; and treating an animal having a disease or
CC condition associated with endothelial lipase, comprising administering to
CC the animal a therapeutic or prophylactic amount of the compound so that
CC expression of endothelial lipase is inhibited. The antisense
CC oligonucleotide is useful for inhibiting the expression of endothelial
CC lipase in cells or tissues to prevent or treat diseases associated with
CC aberrant endothelial lipase expression, such as cardiovascular disease.
CC In addition, the compound is used for diagnostics, prophylaxis, or as
CC research reagents or kits. This sequence represents a mouse endothelial
CC lipase antisense oligonucleotide.
XX
XX Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.5e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 485 TCCGGCAGCGTACAGCTG 504
DB 20 TCGTCATCTACTACAGCTG 1
RESULT 1412
ADP66991
ID ADP66991 standard; DNA; 20 BP.
XX
XX ADP66991;
XX
XX 09-SEP-2004 (first entry)
XX
XX Mouse endothelial lipase antisense oligonucleotide seqid 247.
DE
DE antisense therapy; endothelial lipase;
KW endothelial lipase associated disorder; cardiovascular disease; mouse;
KW antisense oligonucleotide; antisense technology; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004115653-A1.
XX
XX 17-JUN-2004.
XX
XX
XX
XX

```


OY 2922 GCGGGGCGTGGGGGGCGTG 2941
 Db 2 GTGGGGTGTGGGGGGGTGTG 21

RESULT 1417
 AAZ41051/C
 ID AAZ41051 standard; DNA; 21 BP.

AC AAZ41051;
 XX 26-JAN-2000 (first entry)
 DT Human ELK-1 PCR reverse primer SEQ ID NO:203.

DE Identification; genetic target; gene modulation; human; probe;
 KW antisense oligonucleotide; phosphorothioate; PCR primer;
 KW nucleotide sequence-based technology; antisense drug discovery;
 KW target validation; ss.

OS Synthetic.
 OS Homo sapiens.
 XX WO953101-A1.
 PN 21-OCT-1999.

XX 13-APR-1999; 99WO-US008268.
 XX 13-APR-1998; 98US-0081483P.
 PR 28-APR-1998; 98US-00067638.

XX (ISIS-) ISIS PHARM INC.
 XX Cowert LM, Baker BF, Mcneil J, Freier SM, Sasmor HM, Brooks DG;
 PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
 DR WPI; 1999-620446/53.

XX Identifying compounds which modulate expression of nucleic acids, used to
 PT provide compounds having defined physical, chemical or bioactive
 PT properties, e.g. antisense activity.

XX Example 23; Page 103; 264pp; English.

CC A method has been developed of defining a set of compounds that modulate
 CC the expression of a target nucleic acid (tNA) sequence via binding of the
 CC compounds with the tNA sequence. The method comprises generating a
 CC library of virtual compounds in silico according to defined criteria, and
 CC evaluating in silico the binding of the virtual compounds with the tNA
 CC according to defined criteria. Also described are: (1) a method of
 CC defining a set of oligonucleotides (ONS) that modulate the expression of
 CC a tNA sequence, via binding of the ONS with the tNA sequence comprising
 CC generating a library of virtual compounds in silico according to defined
 CC criteria, and evaluating in silico the binding of the virtual ONS with
 CC the tNA according to defined criteria; and (2) a method of defining a set
 CC of compounds that modulate the expression of a tNA sequence via binding
 CC of the compounds with the tNA. The methods can be used for the generation
 CC and identification of synthetic compounds having defined physical,
 CC chemical or bioactive properties. Information gathered from assays of
 CC such compounds is used to identify nucleic acid sequences that are
 CC tractable to a variety of nucleotide sequence-based technologies, e.g.
 CC antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
 CC AAZ52701 to AAZ52706, represent sequences used in the exemplification of
 CC the present invention

XX Sequence 21 BP; 3 A; 10 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 1.6e+03;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 860 AGCTGTGGAGGCTGACGAG 879
 Db 20 AGCTGTGGATGCAGAGGAG 1

RESULT 1418
 AAX55050
 ID AAX55050 standard; DNA; 21 BP.

XX AAX55050;
 AC AAX55050;
 XX 05-JUL-1999 (first entry)
 DT C/EBP-beta antisense oligonucleotide fragment.

DE Antisense oligonucleotide; multiple target; antisense treatment;
 XX impaired respiration; inflammation; lung disease;
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KW acute asthma; allergy; asthma; impeded respiration;
 KW respiratory distress syndrome; pain; cystic fibrosis;
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KW prostate cancer; ss.

XX Synthetic.

XX WO9913886-A1.

XX 25-MAR-1999.

XX 17-SEP-1998; 98WO-US019419.

XX 17-SEP-1997; 97US-0059160P.

XX 09-JUN-1998; 98US-00093972.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW;

XX WPI; 1999-229400/19.

XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.

XX Disclosure; Page 70; 120pp; English.

CC The specification describes antisense oligonucleotides (AAX52869-X55271)
 CC directed against at least 2 mRNAs selected from target genes, coding and
 CC non-coding regions of RNAs corresponding to target genes, gene initiation
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
 CC end and the juxta-section between coding and non-coding regions and all
 CC segments of RNAs encoding proteins associated with one or more diseases,
 CC conditions or mixtures. The antisense oligonucleotides may be derived
 CC from sequences AAX5272-74. These multiple target oligonucleotides
 CC (specifically AAX5180-271) can be used for the antisense treatment of
 CC diseases and conditions. Typical diseases and conditions are those
 CC associated with impaired respiration and inflammation, including lung
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
 CC acute asthma, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer, as
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
 CC well as all types of cancers which may metastasize or have metastasized
 CC to the lungs, including breast and prostate cancer

XX Sequence 21 BP; 0 A; 6 C; 14 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 1.6e+03;

| | |
|-------------|---|
| RESULT 1420 | |
| AAx79319 | |
| ID AAX79319 | standard; DNA; 21 BP. |
| XX | |
| XX | |
| AC | AAX79319; |
| XX | |
| DT | 31-AUG-1999 (first entry) |
| XX | |
| DE | Human Lymphocytic Virus Binding Lectin gene primer #3. |
| XX | |
| XX | |
| KW | Human; lymphocytic virus-binding lectin; LVBL; HIV; gene expression; |
| KW | antibody; primer; probe; diagnosis; infection; vector; antisense; |
| KW | cell proliferation; haematopoietic; progenitor cell; aplasia; ss; |
| KW | medullary hypoplasia. |
| XX | |
| XX | Synthetic. |
| OS | Homo sapiens. |
| XX | |
| PN | FR2771750-A1. |
| XX | |
| PD | 04-JUN-1999. |
| XX | |
| XX | |
| PF | 03-DEC-1997; 97FR-00015224. |
| XX | |
| XX | |
| PR | 03-DEC-1997; 97FR-00015224. |
| XX | |
| XX | (UYN1-) UNIV NICE-SOPHIA ANTIPOLIS. |
| PA | |
| PI | Lefebvre JC, Giordanengo V, Bannwarth S; |
| XX | |
| XX | |
| DR | WPI; 1999-349542/30. |
| XX | |
| XX | |
| PT | Lymphocytic virus-binding lectin LVBL - and corresponding DNA, vectors, |
| PT | antibodies, etc., useful for diagnosis or therapy of HIV infection. |
| XX | |
| PS | Claim 12: Page 56: 72pb: French. |

Sequences AAX79317-X79320 represent primers useful for detecting the gene encoding a human lymphocytic virus-binding lectin (LVBL; AAX79316). The

CC lectin was isolated from HIV-infected CEM cells and has a molecular weight of 47 kD. LVBL gene expression was shown to be enhanced in the

| | |
|----|--|
| CC | presence of an inactive HIV strain; minus antibodies to LVBL can be used |
| CC | to detect the LVBL polypeptide and LVBL polynucleotides can be used as |
| CC | primers and probes for detecting LVBL nucleic acids, e.g. for diagnosis |
| CC | of a viral infection, especially an HIV infection. Antibodies, vectors |
| CC | and (anti)sense oligonucleotides can be used to prevent or treat a viral |
| CC | infection, especially an HIV infection, or modulate cell proliferation, |
| CC | especially to stimulate proliferation of haematopoietic progenitor cells |
| CC | in the treatment of medullary hypoplasia or aplasia |
| XX | |
| SQ | Sequence 21 BP; 8 A; 0 C; 13 G; 0 T; 0 U; 0 Other; |
| | |
| | Query Match 0.4%; Score 15.2; DB 1; Length 21; |
| | Best Local Similarity 85.0%; Pred. NO. 1.6e+03; |
| | Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0; |
| | |
| QY | 184 GGGGAGGACGAGCTCAGGA 203 |
| Dd | 1 GGGGAGGACGAGGAGGGA 20 |
| | |
| | RESULT 1421 |
| | AAZ06610/c |

ID
AAZ06610 standard; DNA; 21 BP.
XX
AC
XX
AAZ06610;
XX

DT 23-NOV-1999 (first entry)
XX

DE reverse PCR primer for amplification of human ELK-1.
XX

Human ELK-1; p62TCF; Ets domain transcription factor protein; apoptosis; expression inhibition; infection; inflammation; tumour formation;

KW diagnosis; phosphorothioate; antisense compound; PCR primer; ss.

XX Synthetic.

OS Homo sapiens.

XX US5948680-A.

XX 07-SEP-1999.

XX 17-DEC-1998; 98US-00213767.

XX 17-DEC-1998; 98US-00213767.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Cowart LM;

XX WPI; 1999-517959/43.

PT Antisense compound useful for diagnosis, treatment and prevention of disease associated with ELK-1 expression.

PS Example 13; Col 37; 31pp; English.

CC PCR primers AA206609-206610 are used to amplify the human ELK-1 sequence AA206608. Human ELK-1 also known as p62TCF is a member of the ternary complex factor subfamily of Ets-domain transcription factor proteins. Antisense polynucleotides targeted to the ELK-1 nucleic acid molecule AA206571-206607 inhibit the expression of ELK-1. Sequences AA206571-206607 all cause at least 30% inhibition of ELK-1 expression. The antisense sequences can be used to inhibit the expression of human ELK-1 in human cells or tissues in vitro. ELK-1 uses a bipartite recognition mechanism mediated by both protein-DNA and protein-protein interactions to regulate genes by direct and indirect DNA binding and has been shown to control various signal transduction pathways and other cell functions including apoptosis. This means that antisense compounds inhibiting expression of ELK-1 can be used to treat diseases associated with its expression in animals, particularly humans and to prevent or delay infection, inflammation or tumour formation. The compounds can also be used for diagnosis, as research reagents and in kits

XX Sequence 21 BP; 3 A; 10 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 1.6e+03;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 860 AGCTGGTGGAGGCTGACGAG 879

DB 20 AGCTGGTGGATGCAGAGGAG 1

RESULT 1422

AAA34497

ID AAA34497 standard; DNA; 21 BP.

XX AAA34497;

XX 28-JUL-2000 (first entry)

DE Human adenosine receptor related polynucleotide SEQ ID NO:2186.

XX Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytosolic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.

XX

PN WO200009525-A2.

XX 24-FEB-2000.

XX 03-AUG-1999; 99WO-US017712.

XX 03-AUG-1998; 98US-0095212P.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW;

XX WPI; 2000-205971/18.

XX New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or cancers.

PS Disclosure; Page 539; 1343pp; English.

XX The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytosolic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impaired respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasize to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONs break down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA3512 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1880 (AAA32323 to AAA33992) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence listing

XX Sequence 21 BP; 0 A; 6 C; 14 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 1.6e+03;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1476 GCGGGCGCGCGCGCCCCCGG 1495

DB 2 GCGGGCGCGCGCGCGCTGG 21

RESULT 1423

AAF20619

ID AAF20619 standard; DNA; 21 BP.

XX AAF20619;

XX 14-MAR-2001 (first entry)

DE Human C/SBP polynucleotide fragment #2186.

XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration;

KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX Homo sapiens.
 OS
 XX WO200062736-A2.
 PN
 XX 26-OCT-2000.
 PD
 XX 24-MAR-2000; 2000WO-US008020.
 PF
 XX 06-APR-1999; 99US-0127958P.
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX NYCE JW;
 PI
 XX WPI; 2000-679539/66.
 DR
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 XX adenosine receptors during metabolism, useful e.g. for treating cancers
 XX and respiratory obstructions.
 XX
 XX Claim 14; Page 264; 1592pp; English.
 XX
 CC The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 XX
 SQ Sequence 21 BP; 0 A; 6 C; 14 G; 1 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 1476 GCGGGGCGCGCGCGCGCGCG 1495
 DB 2 GCGGGGCGCGCGCGCGCGCTGG 21
 RESULT 1424
 AAC73548
 ID AAC73548 standard; DNA; 21 BP.

XX AAC73548;
 XX 02-FEB-2001 (first entry)
 DT
 XX SNP flanking sequence #120 used in multiplexing PCR/SBE assay.
 DE
 XX Oligonucleotide array; genotyping; single base extension reaction; SBE;
 KW polymorphic locus; single nucleotide polymorphism; ss.
 KW
 XX Unidentified.
 OS
 XX WO200058516-A2.
 PN
 XX 05-OCT-2000.
 PD
 XX 27-MAR-2000; 2000WO-US008069.
 PF
 XX 26-MAR-1999; 99US-0126473P.
 PR
 XX 23-JUN-1999; 99US-0140359P.
 XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA (AFFY-) AFFIMETRIX INC.
 XX Fan J, Hirschhorn JN, Huang X, Kaplan P, Lander ES, Lockhart DU;
 PI Ryder T, Sklar P;
 XX WPI; 2000-656171/63.
 DR
 XX Universal array of oligonucleotides tags attached to a solid substrate
 XX along with locus-specific tagged oligonucleotides useful in genotyping
 XX using single base extension reactions.
 XX
 XX Example 7; Page 61; 70pp; English.
 XX
 CC The present invention relates to an oligonucleotide array comprising
 CC oligonucleotide tags fixed to a solid substrate. The oligonucleotide
 CC array is useful for genotyping a nucleic acid sample at one or more loci
 CC via single base extension (SBE) reactions. A pair of primers is used to
 CC amplify a polymorphic locus in a sample e.g. a single nucleotide
 CC polymorphism (SNP). The present sequence is one such polymorphic locus
 CC used in the present invention. The amplified nucleic acid product is then
 CC used as a template in a SBE reaction with an extension primer. The SBE
 CC reaction products are used to form the oligonucleotide array. Note: This
 CC sequence includes a SNP represented by the degenerate codon in the
 CC sequence
 XX
 XX Sequence 21 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 1 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 754 CACACGTCACCTTTGAGGA 773
 DB 1 CACAAGGTCACCTTTGAGGA 20
 RESULT 1425
 AAH75783
 ID AAH75783 standard; DNA; 21 BP.
 XX
 XX AAH75783;
 AC
 XX 15-OCT-2001 (first entry)
 DT
 XX Human NOV 12 probe.
 DE
 XX NOV; olfactory; cytostatic; immunomodulator; vulnary; anti-HIV;
 KW antiasthmatic; antiinflammatory; gastrointestinal; neuroprotective;
 KW osteopathic; gene therapy; odorant receptor; olfactory receptor;
 KW G-protein coupled receptor; GPCR; neuro-olfactory; trauma; probe;
 KW neoplastic disorder; cancer; adenocarcinoma; lymphoma; prostate cancer;

KW uterus cancer; immune response; AIDS; asthma; Crohn's disease;
 KW multiple sclerosis; Albright hereditary osteodystrophy; ss.
 XX
 XX
 OS Homo sapiens.
 XX WO20015179-A2.
 XX
 PD 02-AUG-2001.
 XX
 XX 29-JAN-2001; 2001WO-US002849.
 XX
 XX 27-JAN-2000; 2000US-0178370P.
 PR 27-JAN-2000; 2000US-0178371P.
 PR 27-JAN-2000; 2000US-0178406P.
 PR 27-JAN-2000; 2000US-0178408P.
 PR 27-JAN-2000; 2000US-0178409P.
 PR 27-JAN-2000; 2000US-0178413P.
 PR 27-JAN-2000; 2000US-0178414P.
 PR 07-FEB-2000; 2000US-0180634P.
 PR 24-JUL-2000; 2000US-0220516P.
 PR 28-JUL-2000; 2000US-0221408P.
 PR 31-JUL-2000; 2000US-0221943P.
 PR 21-DEC-2000; 2000US-0257599P.
 PR 08-JAN-2001; 2001US-0260290P.
 XX
 PA (CURA-) CURAGEN CORP.
 XX
 XX Pravaga SK, Padigar M, Spytek KA, Li L, Tchernev VT, Vernet CM;
 PI Peyman JA, Macdougall J;
 XX WPI; 2001-514556/56.
 DR
 XX New NOVX polypeptides and polynucleotides, useful for treating or
 PT preventing a syndrome associated with a human disease (e.g. disorders of
 PT the neuro-olfactory system), as well as in gene therapy.
 XX
 PS Example 2; Page 229; 242pp; English.
 XX
 CC The present invention relates to novel human NOVX proteins and coding
 CC sequences, where X is any number from 1 to 18 (see AAH75716-AAH75733, and
 CC AAG64400 and AAG66322-AAG66338). NOVX are members of the
 CC odorant/olfactory receptor (OR) family, which are G-protein coupled
 CC receptors (GPCRs). The NOVX proteins and coding sequences are useful as
 CC therapeutics, particularly in the manufacture of a medicament for
 CC treating a syndrome associated with a human disease/disorders of the
 CC neuro-olfactory system, e.g. those induced by trauma, surgery and/or
 CC neoplastic disorders. Furthermore, the coding sequences and proteins are
 CC useful in treating cancer e.g. adenocarcinoma, lymphoma, prostate cancer,
 CC uterus cancer, inappropriate immune response, AIDS, asthma, Crohn's
 CC disease, multiple sclerosis or Albright hereditary osteodystrophy. The
 CC coding sequences are also useful in gene therapy for treating the above
 CC conditions. The present probe was used in an example from the present
 CC invention
 XX
 SQ Sequence 21 BP; 3 A; 9 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1182 GGCCCGGCTGACCCCTGGGCA 1201
 Db 2 GGCCCGGCTGACCCCTGCTCA 21
 RESULT 1426
 AAH62396
 ID AAH62396 standard; DNA; 21 BP.
 XX
 AC AAH62396;
 XX
 XX 09-SEP-2004 (revised)
 DT 12-SEP-2001 (first entry)

XX NFE2L1 polymorphism containing DNA fragment #297.
 DE Single nucleotide polymorphism; SNP; human; cancer; inflammation;
 XX heart disease; paternity testing; forensic science; ds.
 KW
 KW Homo sapiens.
 XX Unidentified.
 OS
 OS Key Location/Qualifiers
 FH variation 11
 FT /tag= a
 FT /standard_name= "single nucleotide polymorphism"
 XX
 XX WO200138576-A2.
 XX 31-MAY-2001.
 XX 17-NOV-2000; 2000WO-US031639.
 XX 24-NOV-1999; 99US-0167334P.
 PR (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA Cargill M, Ireland JS, Lander ES;
 PI WPI; 2001-367705/38.
 XX
 DR New nucleic acid segments of the human genome, particularly from genes
 XX including polymorphic sites, for phenotype correlation, forensics,
 PT paternity testing, medicine and genetic analysis.
 PT
 XX Claim 1; Page 53; 80pp; English.
 PS
 XX DNA sequences AAH62100 - AAH62688 represent segments of human genes which
 CC contain single nucleotide polymorphisms (SNPs). A method is included in
 CC the invention for analysing a nucleic acid sample, which consists of
 CC determining the base occupying any one of the polymorphic sites given in
 CC the SNP containing sequences. The nucleotide sequences can be used in the
 CC diagnosis or monitoring of diseases, such as cancer, inflammation, heart
 CC diseases, diseases of the cardiovascular system, and infection by
 CC microorganisms. The oligonucleotides are also useful in the manufacture
 CC of a medicament for the treatment or prophylaxis of the diseases, and as
 CC a pharmaceutical. SNP containing oligonucleotides are useful in
 CC applications such as phenotype correlation, forensics, paternity testing,
 CC medicine and genetic analysis
 CC
 CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
 XX Sequence 21 BP; 5 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2009 TGGAGGACCTGGACCGTGTG 2028
 Db 1 TGGAGGACCTGGACCGTGTGAC 20
 RESULT 1427
 AAH62650/C
 ID AAH62650 standard; DNA; 21 BP.
 XX
 AC AAH62650;
 XX
 XX 09-SEP-2004 (revised)
 DT 12-SEP-2001 (first entry)
 XX
 DE SLC12A3 polymorphism containing DNA fragment #551.
 XX Single nucleotide polymorphism; SNP; human; cancer; inflammation;
 KW heart disease; paternity testing; forensic science; ds.

```

XX OS Homo sapiens.
XX OS Unidentified.
XX FT variation
XX FT Location/Qualifiers
XX FT 11
XX FT /*tag= a
XX FT /standard_name= "single nucleotide polymorphism"
XX PN WO200138576-A2.
XX PD 31-MAY-2001.
XX PF 17-NOV-2000; 2000WO-US031639.
XX PR 24-NOV-1999; 99US-0167334P.
XX PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX PI Cargill M, Ireland JS, Lander ES;
XX PI WPI; 2001-367705/38.
XX PS New nucleic acid segments of the human genome, particularly from genes
XX PT including polymorphic sites, for phenotype correlation, forensics,
XX PT paternity testing, medicine and genetic analysis.
XX PS Claim 1; Page 73; 80pp; English.
XX CC DNA sequences AAH62100 - AAH62688 represent segments of human genes which
XX CC contain single nucleotide polymorphisms (SNPs). A method is included in
XX CC the invention for analysing a nucleic acid sample, which consists of
XX CC determining the base occupying any one of the polymorphic sites given in
XX CC the SNP containing sequences. The nucleotide sequences can be used in the
XX CC diagnosis or monitoring of diseases, such as cancer, inflammation, heart
XX CC diseases, diseases of the cardiovascular system, and infection by
XX CC microorganisms. The oligonucleotides are also useful in the manufacture
XX CC of a medicament for the treatment or prophylaxis of the diseases, and as
XX CC a pharmaceutical. SNP containing oligonucleotides are useful in
XX CC applications such as phenotype correlation, forensics, paternity testing,
XX CC medicine and genetic analysis
XX CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
XX SQ Sequence 21 BP; 4 A; 7 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1242 GGAGGCCATCGCATTCACA 1261
Db 21 GGAGGTCCTCGGCATTCACA 2

RESULT 1428
AAH62649
ID AAH62649 standard; DNA; 21 BP.
XX AC AAH62649;
XX DT 09-SEP-2004 (revised)
XX DT 12-SEP-2001 (first entry)
XX DE SLIC12A3 polymorphism containing DNA fragment #550.
XX Single nucleotide polymorphism; SNP; human; cancer; inflammation;
XX heart disease; paternity testing; forensic science; ds.
XX OS Homo sapiens.
XX OS Unidentified.
XX FT variation
XX FT Location/Qualifiers
XX FT 11
XX FT /*tag= a
XX FT /standard_name= "single nucleotide polymorphism"
XX PN WO200138576-A2.

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FT variation 11
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX PN WO200138576-A2.
XX PD 31-MAY-2001.
XX PF 17-NOV-2000; 2000WO-US031639.
XX PR 24-NOV-1999; 99US-0167334P.
XX PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX PI Cargill M, Ireland JS, Lander ES;
XX PI WPI; 2001-367705/38.
XX PS New nucleic acid segments of the human genome, particularly from genes
XX PT including polymorphic sites, for phenotype correlation, forensics,
XX PT paternity testing, medicine and genetic analysis.
XX PS Claim 1; Page 73; 80pp; English.
XX CC DNA sequences AAH62100 - AAH62688 represent segments of human genes which
XX CC contain single nucleotide polymorphisms (SNPs). A method is included in
XX CC the invention for analysing a nucleic acid sample, which consists of
XX CC determining the base occupying any one of the polymorphic sites given in
XX CC the SNP containing sequences. The nucleotide sequences can be used in the
XX CC diagnosis or monitoring of diseases, such as cancer, inflammation, heart
XX CC diseases, diseases of the cardiovascular system, and infection by
XX CC microorganisms. The oligonucleotides are also useful in the manufacture
XX CC of a medicament for the treatment or prophylaxis of the diseases, and as
XX CC a pharmaceutical. SNP containing oligonucleotides are useful in
XX CC applications such as phenotype correlation, forensics, paternity testing,
XX CC medicine and genetic analysis
XX CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
XX SQ Sequence 21 BP; 3 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 905 TCAGCTACGGGTGGCTTC 924
Db 1 TCAGCTACTCGGTGGCTTC 20

RESULT 1429
AAH62589
ID AAH62589 standard; DNA; 21 BP.
XX AC AAH62589;
XX DT 09-SEP-2004 (revised)
XX DT 12-SEP-2001 (first entry)
XX DE Gp330 receptor precursor polymorphism containing DNA fragment #490.
XX Single nucleotide polymorphism; SNP; human; cancer; inflammation;
XX heart disease; paternity testing; forensic science; ds.
XX OS Homo sapiens.
XX OS Unidentified.
XX FT variation
XX FT Location/Qualifiers
XX FT 11
XX FT /*tag= a
XX FT /standard_name= "single nucleotide polymorphism"
XX PN WO200138576-A2.

```

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XX 31-MAY-2001.
XX
XX
XX 17-NOV-2000; 2000WO-US031639.
XX
XX 24-NOV-1999; 99US-0167334P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
XX Cargill M, Ireland JS, Lander ES;
XX
XX WPI; 2001-367705/38.
XX
XX New nucleic acid segments of the human genome, particularly from genes
XX including polymorphic sites, for phenotype correlation, forensics,
XX paternity testing, medicine and genetic analysis.
XX
XX Claim 1; Page 68; 80pp; English.
XX
XX DNA sequences AAH62100 - AAH62688 represent segments of human genes which
XX contain single nucleotide polymorphisms (SNPs). A method is included in
XX the invention for analysing a nucleic acid sample, which consists of
XX determining the base occupying any one of the polymorphic sites given in
XX the SNP containing sequences. The nucleotide sequences can be used in the
XX diagnosis or monitoring of diseases, such as cancer, inflammation, heart
XX diseases, diseases of the cardiovascular system, and infection by
XX microorganisms. The oligonucleotides are also useful in the manufacture
XX of a medicament for the treatment or prophylaxis of the diseases, and as
XX a pharmaceutical. SNP containing oligonucleotides are useful in
XX applications such as phenotype correlation, forensics, paternity testing,
XX medicine and genetic analysis
XX
XX Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
XX
XX Sequence 21 BP; 2 A; 8 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 1.6e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 899 GCATCCTCAGCTACGGGGTG 918
XX 2 GCATCCCCAGCTCCTGGTG 21
XX
XX RESULT 1430
XX AAH49091/C
XX ID AAH49091 standard; DNA; 21 BP.
XX
XX AC AAH49091;
XX
XX 12-NOV-2001 (first entry)
XX
XX Human GALT gene associated primer #2.
XX
XX Neonate screening; prenatal screening; gene chip; diagnosis;
XX phenylketonuria; maple syrup disease; galactosemia; homocysteinuria;
XX medium-chain acyl-CoA-dehydrogenase deficiency; biotinidase deficiency;
XX familial hypercholesterolemia; familial defective apolipoprotein-B;
XX cystic fibrosis; Marfan syndrome; Smith-Lemli-Opitz syndrome;
XX androgenital syndrome; ss.
XX
XX Homo sapiens.
XX
XX WO200153520-A2.
XX
XX 26-JUL-2001.
XX
XX 09-JAN-2001; 2001WO-EP000139.
XX
XX 21-JAN-2000; 2000DE-01002446.
XX
XX (CULL/) CULLEN P.
XX
(SED/) SEEDORF U.
XX
Cullen P, Seedorf U;
XX
WPI; 2001-457616/49.
XX
DNA chip, useful for neonatal or prenatal screening for many genetic
XX diseases simultaneously, carries oligonucleotides complementary to
XX phenotypically relevant reference sequences.
XX
Claim 4; Page 71; 101pp; German.
XX
This invention describes a novel nucleotide support (A; gene chip) which
XX carries a selection of oligonucleotides (I) that are identical, or
XX complementary, to segments of reference sequences relevant to at least
XX two genetically determined phenotypes. (A) are used for simultaneous
XX diagnosis of at least two of the following diseases: phenylketonuria
XX (maple syrup disease), galactosemia, homocysteinuria, biotinidase
XX deficiency, medium-chain acyl-CoA-dehydrogenase deficiency, familial
XX hypercholesterolemia, familial defective apolipoprotein-B, cystic
XX fibrosis, Marfan syndrome, Smith-Lemli-Opitz syndrome and androgenital
XX syndrome. Specifically they are used in neonatal or prenatal diagnosis.
XX (A) require a relatively small number of separate hybridization regions
XX (about 500 for testing for 21 specified disorders), so can be used for
XX simultaneous testing for many diseases. Testing is quick, inexpensive,
XX reliable and more sensitive than current physiological methods. AAH4868-
XX AAH489166 represent oligonucleotides used to illustrate the method of the
XX invention
XX
XX Sequence 21 BP; 6 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 21;
XX Best Local Similarity 85.0%; Pred. No. 1.6e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1119 CCCACGCTGGCCAAATGCT 1138
XX 20 CCTCACGCTGGGCAATATCT 1
XX
XX RESULT 1431
XX AAH79135/C
XX ID AAH79135 standard; DNA; 21 BP.
XX
XX AC AAH79135;
XX
XX 20-NOV-2001 (first entry)
XX
XX Human tumour vascular genesis inhibiting factor related PCR primer 31.
XX
XX Human; endostatin; angiostatin; virus; tumour vascular development;
XX tumour vascular genesis inhibiting factor; PCR primer; ss.
XX
XX Synthetic.
XX
XX CN1298947-A.
XX
XX 13-JUN-2001.
XX
XX 01-DEC-2000; 2000CN-00127680.
XX
XX 01-DEC-2000; 2000CN-00127680.
XX
XX (QIAN/) QIAN Q.
XX
XX Qian Q, Che X, Ceng X;
XX
XX WPI; 2001-503384/56.
XX
XX Virus with specific reproduction in a tumor well and effective expression
XX of tumor angiogenesis inhibitor and its construction method.
XX
XX Disclosure; Page 34 (Disclosure); 52pp; Chinese.
```


carbohydrates) and glucocorticoids and inhibition by glucagon so that a combination of these effects can maintain nearly euglycemic conditions in diabetics during short-term fasting, large carbohydrate loads or when fed ad libitum and prevent pathological ketogenesis and ketoacidosis, thus inhibiting the long-term complications of diabetes. The properties of the construct are essentially specific for hepatocytes and well-differentiated hepatoma lines and insulin expression in these cells may have effects additional to those provided by secreted insulin, e.g. inhibition of cellular protein degradation, and inhibition, or stimulation of other intracellular hormone receptors. This sequence represents a reverse transcriptase PCR (RT-PCR) primer used to amplify human insulin, used in the scope of the invention

Sequence 21 BP; 3 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1611 GTGCATCCACAGGACCTGG 1630
Db 21 GCGCATCCACAGGACCTGG 2

RESULT 1436
ABS97565/C
ID ABS97565 standard; DNA; 21 BP.

AC ABS97565;

XX ABS97565;

DT 23-DEC-2002 (first entry)

DE Human epoxide hydrolase 2 polymorphic sequence #56.

XX Human; db; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;
KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR112;
KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
KW epoxide hydrolase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
KW glutathione-S-transferase 12; GSTI2; histamine-N-methyl transferase;
KW HNMT; kallikrein 2; KUK2; nicotinamide-N-methyl transferase; NNMT;
KW NADPH quinone oxidoreductase 2; NQO2; sulfotransferase thermolabile; STM;
KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; uroninase receptor; uPA;
KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
KW multidrug resistance associated protein 3; cancer; prostate;
KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
KW altered drug metabolism; cardiovascular function; colorectal tumour;
KW central nervous system; pulmonary; immunological; SNP;
KW single nucleotide polymorphism.

OS Homo sapiens.

XX W0200257410-A2.

XX 25-JUL-2002.

XX 28-NOV-2001; 2001WO-US044838.

XX 28-NOV-2000; 2000US-00724389.

XX (DNAS-) DNA SCI LAB INC.

XX Guida M, Hall J;

XX WPI; 2002-698522/75.

XX Isolated nucleic acid molecules having polymorphisms in known human genes
PT e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers
PT for locating, identifying and characterizing the genes responsible for
PT disorder-related traits.

PS Example 10; Page 119; 714pp; English.
XX This invention relates to the sequence of an isolated nucleic acid
CC molecule comprising at least one base variation from that of a known
CC human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADRB1),
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding
CC inhibitor (DBI), epoxide hydrolase 2 (EPHX2), 5-lipoxygenase activating
CC protein (FLAP), glutathione-S-transferase 12 (GSTI2), histamine-N-methyl
CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC sulfotransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC (MRP3), orphan nuclear receptor (NR112), or acetylcholine muscarinic
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
CC The polymorphisms in the human genes cited in the invention are useful as
CC genetic linkage markers for locating and characterizing the genes that
CC are responsible for specific traits within the genome and eventually
CC identifying the genes responsible for a variety of disorder-related
CC traits as a result of their e.g., overexpression, constitutive
CC expression, mutation or underexpression. The nucleic acid molecules comprising the
CC and/or treating the disorders. The nucleic acid molecules comprising the
CC polymorphic sequences contained in CYP4501A1, CYP4501A2, CYP4502E1,
CC ARNT, EPHX2, GSTI2, NNMT, NQO2, NR112, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC metabolism. The polymorphic sequences contained in CYP4501A1, CYP4501A2,
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC used to screen for altered cardiovascular function. In COX2 for altered
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
CC nervous system function, in FLAP and HNMT for altered pulmonary,
CC immunological or haematological function, in KUK2 for altered serine
CC protease activity in the prostate, in LTF for altered immunological or
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC peripheral nervous system function. The present sequence represents a
CC polymorphic DNA sequence of the invention

SQ Sequence 21 BP; 4 A; 2 C; 13 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2153 TCTGCCCCCGCCGCCACC 2172
Db 21 TTCTGCACCCGTCGCCACC 2

RESULT 1437

AAL43996/C

XX AAL43996 standard; DNA; 21 BP.

AC AAL43996;

DT 27-SEP-2002 (first entry)

DE Reproductive recombination virus-related oligonucleotide SEQ IN #16.

XX Gene therapy; ss; reproductive recombination virus; tumour cell killing;
KW Epstein-Barr virus; cancer-suppressing gene; vascular inhibition gene;
KW cell factor gene; prodrug-converting enzyme gene; cell death gene;
KW nasopharyngeal cancer; Hodgkin's lymphoma; gastric cancer; PCR; primer.

OS Unidentified.

XX WO200256917-A1.

XX 25-JUL-2002.

PD 17-JAN-2002; 2002WO-CN000025.

XX 18-JAN-2001; 2001CN-00105247.
 XX (VIRG-) VIRGENE BIOTECHNOLOGY LTD.
 XX Qian Q, Che X, Sham S, Wu M;
 XX WPI; 2002-566772/60.
 XX Construction of reproductive recombination virus able to specifically
 PT kill Epstein-Barr associated tumor cells, useful in drugs for treating
 PT e.g. nasopharyngeal cancer, Hodgkin's lymphoma and gastric cancer.
 XX
 XX Example 2; Page 13; 44pp; Chinese.
 XX The invention comprises a reproductive recombination virus capable of
 CC killing specifically tumour cells associated with Epstein-Barr (EB)
 CC virus. The virus of the invention comprises an insertion of a target gene
 CC into the non-reproduction-requiring domain in the virus gene group (the
 CC target gene is a cancer-suppressing gene, vascular inhibition gene, cell
 CC factor gene, prodrug-converting enzyme gene or cell death gene). The
 CC reproductive recombination virus of the invention is useful for treating
 CC nasopharyngeal cancer, Hodgkin's lymphoma and gastric cancer. The present
 CC DNA sequence was used in an example of the invention
 XX
 XX Sequence 21 BP; 9 A; 6 C; 4 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1457 GTAACCTGGCGGAGTTTCTG 1476
 DB 21 GTTACTGCTGGATTTCIG 2
 RESULT 1438
 ADA08083/C
 ID ADA08083 standard; DNA; 21 BP.
 XX
 XX ADA08083;
 XX
 XX 06-NOV-2003 (first entry)
 DT
 DE Human PFM2 cDNA RT-PCR primer #2.
 XX
 XX Human; PR Family Member 2; PFM2; PFM PR domain; PFM zinc finger domain;
 KW PFM ZF domain; modulation of cell growth; cancer;
 KW cell degeneration disease; Alzheimer's disease; Parkinson's disease;
 KW insulin-dependent diabetes mellitus; IDDM; neuroprotective;
 KW antiparkinsonian; antidiabetic; cytostatic; RT-PCR;
 KW reverse transcriptase-PCR; primer; ss.
 XX
 XX Homo sapiens.
 OS
 XX
 XX US6586579-B1.
 PN
 XX
 XX 01-JUL-2003.
 PD
 XX
 XX 03-SEP-1999; 99US-00389956.
 PF
 XX
 XX 03-SEP-1999; 99US-00389956.
 PR
 XX
 XX (BURN-) BURNHAM INST.
 PA
 XX
 XX Huang S;
 PI
 XX
 XX WPI; 2003-669568/63.
 DR
 XX
 XX New PR Family Member 2 oligonucleotide, useful for preparing a
 PT composition for modulating cell growth for treating cancer or diseases of
 PT cell degeneration, e.g., Alzheimer's disease or insulin-dependent
 PT diabetes mellitus.

XX Example 2; Col 29; 95pp; English.
 XX The present invention relates to the isolation of human and mouse PR
 CC Family Member (PFM) proteins, and the polynucleotide sequences encoding
 CC them. Also disclosed are PFM PR and PFM zinc finger (ZF) domains, and the
 CC polynucleotide sequences encoding them. The invention also discloses PFM
 CC oligonucleotides and methods for detecting a PFM polynucleotide sequence
 CC in a sample. The PFM polypeptide and polynucleotide sequences are useful
 CC for preparing a composition for modulating cell growth for treating
 CC cancer or diseases of cell degeneration, e.g. as Alzheimer's disease,
 CC Parkinson's disease or insulin-dependent diabetes mellitus (IDDM). The
 CC present sequence represents a primer used in the examples of the present
 CC invention.
 XX
 XX Sequence 21 BP; 1 A; 6 C; 5 G; 9 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1722 GAAGACACCAACGCGCGGC 1741
 DB 21 GAAGACATCAACGCGGC 2
 RESULT 1439
 ADB78533
 ID ADB78533 standard; DNA; 21 BP.
 XX
 XX ADB78533;
 AC
 XX
 XX 04-DEC-2003 (first entry)
 DT
 XX
 DE Probe sequence #36 related to the invention.
 XX
 XX human leukocyte antigen; HLA; probe; PCR; ss.
 KW
 XX Synthetic.
 OS
 XX WO2003027309-A2.
 PN
 XX
 XX 03-APR-2003.
 PD
 XX
 XX 24-SEP-2002; 2002WO-US030238.
 PF
 XX
 XX 24-SEP-2001; 2001US-0324421P.
 PR
 XX (ONEL-) ONE LAMBDA.
 PA
 XX Saito K, Lee J, Blair L;
 PI
 XX
 XX WPI; 2003-363216/34.
 DR
 XX
 XX Detecting the presence of a target nucleic acid sequence on a sample
 PT nucleic acid strand, useful for human leukocyte antigen tissue typing,
 PT comprises contacting a sample with a diagnostic probe under hybridizing
 PT conditions.
 XX
 XX Example 4; Page 32; 62pp; English.
 PS
 XX The present invention relates to the detecting of a target nucleic acid
 CC sequence on a sample nucleic acid strand. The methods are useful for
 CC detecting the presence or absence of target nucleic acid sequences on
 CC sample nucleic acid strands that are characteristic of pathogens or gene
 CC variations and mutations relating to human leukocyte antigen (HLA) or T-
 CC cell receptor gene sequences, e.g. for HLA tissue typing, detecting
 CC genetically inherited diseases or detecting infectious organisms in
 CC tissues. The diagnostic probes are useful for detecting the presence of
 CC particular target nucleotide sequences. The present invention provides
 CC improved methods of detecting sample/target nucleic acid sequences, where
 CC the use of diagnostic probes having increased specificity reduces the
 CC number of alleles detected, which increases the resolution of the method,

The invention relates to FCTR polypeptides and the polynucleotides encoding them. The sequences of the invention are useful for the

The invention comprises a human antibody for inhibiting platelet aggregation by its exclusive binding to the activated state of platelet integrin receptor GPIIb/IIIa. The antibody of the invention is useful for preparing a diagnostic composition for determining the number of activated thrombocytes or for blocking the platelet integrin receptor on thrombocytes. The antibody of the invention is useful for testing

CC thrombosis or myocardial infarction. The present DNA sequence represents
 XX a PCR primer that was used in an example of the invention.
 SQ Sequence 21 BP; 3 A; 4 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 854 AGGAGGAGCTGGTGGAGGCT 873

DB 2 AGTGACGCTGGTGGAGTCT 21

RESULT 1442

ID ADF88266/c

ADP88266 standard; DNA; 21 BP.

XX ADF88266;

XX 26-FEB-2004 (first entry)

DE Single nucleotide polymorphism detection primer, SEQ ID No 1849.

XX human; single nucleotide polymorphism; microarray; side effect; ss;
 KW primer; PCR.

OS Synthetic.

OS Homo sapiens.

XX JP2003235571-A.

PN 26-AUG-2003.

XX 12-FEB-2002; 2002JP-00034717.

XX 12-FEB-2002; 2002JP-00034717.

XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.

XX WPI; 2003-820454/77.

XX Novel polynucleotide useful for detecting single nucleotide polymorphisms
 PT in human gene.

PS Claim 2; SEQ ID NO 1849; 704pp; Japanese.

XX The invention relates to a novel polynucleotide isolated and purified
 CC from a human gene having any one of 935 fully defined sequences as given
 CC in specification, or a sequence having a base substitution. The invention
 CC further relates to: an oligonucleotide containing single nucleotide
 CC polymorphisms; a PCR primer set chosen from the combination of two DNA
 CC fragments from any one of 1220 fully defined sequences as given in
 CC specification; a labelling probe containing the SNP containing oligo; and
 CC a microarray equipped with the SNP containing oligo. The isolated human
 CC gene of the invention is useful for detecting the single nucleotide
 CC polymorphisms in human gene. The isolated human gene is also useful for
 CC diagnosis of disease and determination of side effect to a medical agent.
 CC The isolated human gene is also effective in detecting single nucleotide
 CC polymorphisms in a human gene. This polynucleotide sequence represents
 CC one of the PCR primers used in the single nucleotide polymorphism
 CC detection method of the invention.

SQ Sequence 21 BP; 9 A; 9 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2330 TGTGCGTGTGTGTGTGTG 2349

DB 20 TGTGCTCTGTGTGTGTG 1

RESULT 1443

ADG30316/c

ID ADG30316 standard; RNA; 21 BP.

XX ADG30316;

XX 26-FEB-2004 (first entry)

XX TGFBI-targeted siNA DNA-RNA hybrid - SEQ ID 882.

XX double-stranded short interfering nucleic acid; siNA;
 KW antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian;
 KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
 KW Alzheimer's; Parkinson's; epilepsy; dementia; Huntington's;
 KW amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; TGFBI.

OS Unidentified.

OS Synthetic.

XX WO2003074654-A2.

XX 12-SEP-2003.

XX 20-FEB-2003; 2003WO-US005028.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;

PI Jamison S, Usman N, Thompson J;

XX WPI; 2003-731676/69.

XX New double-stranded short interfering nucleic acid molecule, useful for
 PT down-regulating the expression of an endogenous mammalian target gene or
 PT for treating diseases that respond to modulation of gene expression or
 PT activity.

XX Example 24; SEQ ID NO 882; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid
 CC (siNA) molecule that down-regulates expression of an endogenous mammalian
 CC target gene comprising one or more chemical modifications and each strand
 CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
 CC the invention demonstrates antiarteriosclerotic, neuroprotective,
 CC nootropic, antiparkinsonian and anticonvulsant activities and may be
 CC useful for down-regulating the expression of an endogenous mammalian
 CC target gene and therefore in the treatment of any disease or condition
 CC that responds to modulation of gene expression or activity in a cell,
 CC tissue or organism. The disease or condition may include pulmonary
 CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
 CC Parkinson's disease, epilepsy, dementia, Huntington's disease or
 CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
 CC gene therapy applications. The current sequence is that of the siNA DNA-
 CC RNA hybrid of the invention.

SQ Sequence 21 BP; 4 A; 3 C; 8 G; 2 T; 4 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1595 ACTTGCCCTCCAGAGTGC 1614

DB 20 ACTCTGCTCCCAAGTGC 1

KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; db.
XX
OS Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US013143.
PF
XX 24-APR-2001; 2001US-0286036P.
PR
XX (EPIC-) EPIGENESIS PHARM INC.
PA
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
PI
XX WPI; 2003-093058/08.
DR
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
PT
XX
XX Claim 15; SEQ ID NO 11555; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 21 BP; 0 A; 6 C; 14 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1476 GCGGGGCGCGCGCGCCCGG 1495

DB 2 GCGGGGCGCGCGCGCGCTGG 21

RESULT 1447
ADH44226
ID ADH44226 standard; DNA; 21 BP.
XX
XX ADH44226;
AC
XX 22-APR-2004 (first entry)
DT
XX Penicillium citrinum reductase mutagenesis PCR primer SEQ ID NO:13.
DE
XX reductase; Penicillium citrinum; enzyme;
XX (S)-4-halo-3-hydroxybutyrate ester; 4-halo-3-oxobutyrate ester;
KW modified reductase; beta-keto acid reduction; organic synthesis;
KW mutagenesis; PCR primer; ss.
KW
XX Synthetic.
OS Penicillium citrinum.
OS
XX EP1386961-A2.
PN
XX 04-FEB-2004.
PD
XX 30-JUN-2003; 2003EP-00254142.
PF
XX 03-JUL-2002; 2002JP-00194344.
PR
XX (SUMO) SUMITOMO CHEM CO LTD.
PA
XX Asako H, Shimizu M;
PI
XX WPI; 2004-135408/14.
DR
XX New modified reductases comprising an amino acid sequence having a
PT substitution at position 54 and/or 104, or a further amino acid deletion,
PT substitution or addition, useful for reduction reaction of e.g. beta-keto
PT acid.
PT
XX Example 3; SEQ ID NO 13; 40pp; English.
XX
CC The present invention describes a modified reductase (1) isolated from
CC Penicillium citrinum comprising: (a) a sequence of 325 amino acids (SEQ
CC ID NO: 1, ADH44214) having a substitution at amino acid position 54
CC and/or 104; or (b) an amino acid sequence of (a) having further deletion,
CC substitution, or addition of an amino acid(s). Also described: (1) a
CC polynucleotide comprising a nucleotide sequence encoding the amino acid
CC sequence of the reductase defined above; (2) a vector comprising the
CC polynucleotide; (3) a transformant comprising the polynucleotide or
CC vector; (4) producing (S)-4-halo-3-hydroxybutyrate ester by reacting 4-
CC halo-3-oxobutyrate ester with the transformant of (3), or its treated
CC material; (5) modifying an enzyme by substituting at least one single
CC amino acid at amino acid positions 54 and 104 of SEQ ID NO: 1; and (6)
CC producing a modified enzyme gene by replacing a codon that corresponds to
CC at least one of the amino acids of the positions 54 and 104 of SEQ ID NO:
CC 1 with a codon that corresponds to another amino acid(s) in a nucleotide
CC sequence that encodes SEQ ID NO: 1. The modified reductase can be used
CC for reduction reaction, specifically reduction reaction of beta-keto
CC acid, and in organic synthesis reaction for the production of compounds
CC used as active ingredients of medicaments, agrochemicals or their
CC intermediates, especially optically active compounds. The present
CC sequence represents a mutagenic PCR primer for reductase, which is used
CC in an example from the present invention.
XX
SQ Sequence 21 BP; 6 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 2443 TGGTGTCTGACGACGAGGG 2462

DB 1 TGGTACTACGACGAGGG 20

| | |
|-------------|---|
| DE | Primer of the invention #252. |
| XX | |
| KW | human; single nucleotide polymorphism; SNP; ss; primer. |
| XX | |
| OS | Synthetic. |
| XX | |
| PN | JP2003259875-A. |
| XX | |
| PD | 16-SEP-2003. |
| XX | |
| PF | 08-MAR-2002; 2002JP-00064373. |
| XX | |
| PR | 08-MAR-2002; 2002JP-00064373. |
| XX | |
| PA | (KAGA-) KAGAKU GIJTSU SHINKO JIGYODAN. |
| XX | |
| DR | WPI; 2004-093977/10. |
| XX | |
| PT | Novel polynucleotide useful for PCR amplification along with two DNA |
| PT | fragment from another set of sequences, or for detecting single |
| PT | nucleotide polymorphism in human gene. |
| XX | |
| PS | Claim 2; SEQ ID NO 3561; 2627bp; Japanese. |
| XX | |
| CC | The present invention relates to a polynucleotide isolated from a human |
| CC | gene and is useful for detecting a single nucleotide polymorphism in a |
| CC | human gene or for diagnosing of disease. The invention enables the |
| CC | detection of a single nucleotide polymorphism in a human gene. The |
| CC | present sequence represents a primer of the invention. |
| XX | |
| SQ | Sequence 21 BP; 8 A; 9 C; 2 G; 2 T; 0 U; 0 Other; |
| | |
| | Query Match 0.4%; Score 15.2; DB 1; Length 21; |
| | Best Local Similarity 85.0%; Pred. No. 1.6e+03; |
| | Matches 1; Conservative 0; Mismatches 3; Indels 0; Gaps |
| | |
| Qy | 2323 GTGCTGTGTGCGGTGTGT 2342 |
| | |
| Db | 21 GAGTGTGTGCACGTGTGT 2 |
| | |
| RESULT 1450 | |
| ADJ51062 | |
| ID | ADJ51062 standard; DNA; 21 BP. |
| XX | |
| AC | ADJ51062; |
| XX | |
| DT | 06-MAY-2004 (first entry) |
| XX | |
| DE | Human NOVX-associated primer/probe #3. |
| XX | |
| KW | ss; probe; NOVX; autoimmune disease; Alzheimer's disease; stroke; |
| KW | allergy; Parkinson's disease; Huntington's disease; multiple sclerosis; |
| KW | anxiety; pain; diabetes; graft versus host disease; pancreatitis; |
| KW | obesity; ulcer; anaemia; cancer; viral infection; bacterial infection; |
| XX | parasitic infection; primer. |
| XX | |
| OS | Unidentified. |
| XX | |
| PN | US2004030096-A1. |
| XX | |
| PD | 12-FEB-2004. |
| XX | |
| PF | 01-AUG-2002; 2002US-00210281. |
| XX | |
| PR | 02-AUG-2001; 2001US-0309501P. |
| PR | 03-AUG-2001; 2001US-0310291P. |
| PR | 08-AUG-2001; 2001US-0310951P. |
| PR | 09-AUG-2001; 2001US-0311292P. |
| PR | 13-AUG-2001; 2001US-0311979P. |
| PR | 14-AUG-2001; 2001US-0312203P. |
| PR | 17-AUG-2001; 2001US-0313201P. |
| PR | 20-AUG-2001; 2001US-0313643P. |
| PR | |

20-AUG-2001; 2001US-0313702P.
 21-AUG-2001; 2001US-0314031P.
 23-AUG-2001; 2001US-0314466P.
 28-AUG-2001; 2001US-0315403P.
 29-AUG-2001; 2001US-0315853P.
 05-MAR-2002; 2002US-0361775P.
 05-MAR-2002; 2002US-0361832P.
 (GORM/) GORMAN L.
 (ZERH/) ZERHUSEN B D.
 (EDIN/) EDINGER S R.
 (PADL/) PADIGARU M.
 (GUOX/) GUO X.
 (KEKU/) KEKUDA R.
 (ZHON/) ZHONG M.
 (PATT/) PATTURAJAN M.
 (MILL/) MILLER C E.
 (JIWW/) JI W.
 (PENA/) PENA C E A.
 (BURG/) BURGESS C E.
 (SCIO/) SCIORE P.
 (STON/) STONE D J.
 (TAUP/) TAUPIER R J.
 (CASH/) CASHMAN S J.
 (ROTH/) ROTHENBERG M E.
 (MALT/) MALTANKAR U M.
 (BOLD/) BOLDOF F L.
 Gorman L, Zerhusen BD, Edinger SR, Padigaru M, Guo X, Kekuda R;
 Zhong M, Patturajan M, Miller CE, Ji W, Pena CE, Burgess CE;
 Sciore P, Stone DJ, Taupier RJ, Caeman SJ, Rothenberg ME;
 Malyankar UM, Boldog FL;
 WPI; 2004-168942/16.
 New NOVX polypeptides and polynucleotides, useful in diagnosing, treating
 or preventing diseases or conditions, e.g. autoimmune disease,
 Alzheimer's disease, diabetes, graft versus host disease, cancer or viral
 or bacterial infections.
 Disclosure; SEQ ID NO 127; 342pp; English.
 The invention relates to an isolated NOVX polypeptide (of 44 disclosed)
 comprising its mature form, a sequence having at least 95% sequence
 identity to NOVX or a sequence comprising one or more conservative
 substitutions in the amino acid sequence of NOVX. Also included are a
 composition comprising NOVX and a carrier, a kit comprising, in one or
 more containers, the composition, a method of identifying an agent that
 binds to NOVX, a method for identifying a potential therapeutic agent for
 use in treatment of a pathology related to aberrant expression or
 aberrant physiological interactions of NOVX, a method for screening for a
 modulator of activity of or of latency or predisposition to a pathology
 associated with NOVX, a method for modulating the activity of NOVX, a
 method of treating or preventing a pathology associated with NOVX or a
 pathological state in a mammal, an isolated nucleic acid molecule
 encoding a NOVX protein, a vector comprising the nucleic acid molecule,
 a cell comprising the vector, an antibody that immunospecifically binds
 to NOVX, a method for determining the presence or amount of NOVX or the
 nucleic acid molecule in a sample, a method for determining the presence
 of or predisposition to a disease associated with altered levels of
 expression of NOVX or the nucleic acid molecule in a first mammalian
 subject and a method of producing NOVX (comprising culturing the cell
 under conditions that lead to expression of the polypeptide). NOVX is
 useful in the manufacture of a medicament for treating a syndrome
 associated with a human disease associated with NOVX. The polypeptides
 and nucleic acid molecules are useful in diagnosing, treating or
 preventing diseases or conditions, e.g. autoimmune disease, Alzheimer's
 disease, stroke, allergies, Parkinson's disease, Huntington's diseases,
 multiple sclerosis, anxiety, pain, diabetes, graft versus host disease,
 pancreatitis, obesity, ulcers, anaemia, cancer, viral or bacterial and
 parasitic infections (many more diseases and disorders are listed in the
 specification). The present sequence is a primer or probe included in the
 sequence listing but not mentioned anywhere else in the specification.

XX SQ Sequence 21 BP; 3 A; 4 C; 6 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3669 CATGGCTCAGGTGCTCTCT 3688
 ||||| ||||| ||||| |||||
 Db 2 CATGGCTCAGGTGCTCTCT 21
 RESULT 1451
 ADJ97593
 ID ADJ97593 standard; DNA; 21 BP.
 XX AC ADJ97593;
 XX DT 06-MAY-2004 (first entry)
 XX DE Human Flt-1 DNA sequence, a target for siRNA inhibition SeqID 366.
 XX KW human; ss; short interfering RNA; siRNA; angiogenesis;
 KW vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1;
 KW Flk-1/KDR; kinase domain region; diabetic retinopathy;
 KW age-related macular degeneration; inflammatory disease; psoriasis;
 KW rheumatoid arthritis; cancer; breast; retinoblastoma; Wilms' tumour;
 KW lymphoma; cytostatic; antiangiogenic; ophthalmological; antiinflammatory;
 KW antipsoriatic; antirheumatic; antiarthritic.
 XX OS Homo sapiens.
 XX PN WO2004009769-A2.
 XX PD 29-JAN-2004.
 XX PF 18-JUL-2003; 2003WO-US022444.
 XX PR 24-JUL-2002; 2002US-0398417P.
 XX PR 14-NOV-2002; 2002US-00294228.
 XX PA (UYPE-) UNIV PENNSYLVANIA.
 XX PI Tolentino MJ, Reich SJ;
 XX WPI; 2004-203472/19.
 XX Novel short interfering RNA (siRNA) comprises sense and antisense RNA
 strands, useful for inhibiting expression of human vascular endothelial
 growth factor mRNA, for treating angiogenic disease, e.g. diabetic
 retinopathy and cancer.
 XX Disclosure; SEQ ID NO 366; 218pp; English.
 XX This invention relates to novel compositions that comprise short
 interfering RNA (siRNA) molecules, which can be used to inhibit
 angiogenesis. Specifically, it refers to siRNAs that target and cause
 RNAi-induced degradation of mRNA from human vascular endothelial growth
 factor (VEGF), the VEGF receptor (Flt-1) and the Flk-1/KDR (kinase domain
 region) genes, as well as mutants derived thereof. The present invention
 describes sense and antisense RNA strands that form an RNA duplex and
 bind to the target mRNA, such that expression is inhibited and the target
 degraded. As such, siRNA administered in combination with a therapeutic
 agent is useful for treating diseases associated with angiogenesis and
 the overexpression of VEGF, which include diabetic retinopathy, age-
 related macular degeneration, inflammatory disease, psoriasis and
 rheumatoid arthritis. Furthermore, it can be used to treat various
 cancers including breast, retinoblastoma, Wilms' tumour and lymphoma.
 CC Accordingly, these compositions exhibit cytostatic, antidiabetic,
 CC ophthalmological, antiinflammatory, antipsoriatic, antirheumatic and
 CC antiarthritic activities. This oligonucleotide is a human Flt-1 DNA
 CC oligo, a target for siRNA inhibition of the invention.
 XX

SQ Sequence 21 BP; 7 A; 4 C; 8 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1300 ATGCTGAAGACGATGCCAC 1319
 |||||
 Db 2 ATGCTGAAGAGGGGCCAC 21

RESULT 1452
 ADJ97641
 ID ADJ97641 standard; DNA; 21 BP.
 XX
 AC ADJ97641;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Human Flt-1 DNA sequence, a target for siRNA inhibition SeqID 414.
 XX
 KW human; ss: short interfering RNA; siRNA; angiogenesis;
 KW vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1;
 KW Flk-1/KDR; kinase domain region; diabetic retinopathy;
 KW age-related macular degeneration; inflammatory disease; psoriasis;
 KW rheumatoid arthritis; cancer; breast; retinoblastoma; Wilms' tumour;
 KW lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;
 KW antipsoriatic; antirheumatic; antiarthritic.
 XX
 OS Homo sapiens.
 XX
 WO2004009769-A2.
 XX
 PD 29-JAN-2004.
 XX
 PF 18-JUL-2003; 2003WO-US022444.
 XX
 PR 24-JUL-2002; 2002US-0398417P.
 PR 14-NOV-2002; 2002US-00294228.
 XX
 PA (UYPE-) UNIV PENNSYLVANIA.
 XX
 PI Tolentino MJ, Reich SJ;
 PT
 XX
 DR WPI; 2004-203472/19.
 XX
 PT Novel short interfering RNA (siRNA) comprises sense and antisense RNA
 PT strands, useful for inhibiting expression of human vascular endothelial
 PT growth factor mRNA, for treating angiogenic disease, e.g. diabetic
 PT retinopathy and cancer.
 XX
 PS Disclosure; SEQ ID NO 414; 218pp; English.
 XX
 CC This invention relates to novel compositions that comprise short
 CC interfering RNA (siRNA) molecules, which can be used to inhibit
 CC angiogenesis. Specifically, it refers to siRNAs that target and cause
 CC RNAi-induced degradation of mRNA from human vascular endothelial growth
 CC factor (VEGF), the VEGF receptor (Flt-1) and the Flk-1/KDR (kinase domain
 CC region) genes, as well as mutants derived thereof. The present invention
 CC describes sense and antisense RNA strands that form an RNA duplex and
 CC bind to the target mRNA, such that expression is inhibited and the target
 CC degraded. As such, siRNA administered in combination with a therapeutic
 CC agent is useful for treating diseases associated with angiogenesis and
 CC the overexpression of VEGF, which include diabetic retinopathy, age-
 CC related macular degeneration, inflammatory disease, psoriasis and
 CC cancers including breast, retinoblastoma, Wilms' tumour and lymphoma.
 CC Accordingly, these compositions exhibit cytostatic, antidiabetic,
 CC ophthalmological, antiinflammatory, antipsoriatic, antirheumatic and
 CC antiarthritic activities. This oligonucleotide is a human Flt-1 DNA
 CC oligo, a target for siRNA inhibition of the invention.
 XX
 SQ Sequence 21 BP; 6 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1609 AAGTGATCCACAGGACCT 1628
 |||||
 Db 2 AAGTGATTCATCGGACCT 21

RESULT 1453
 ADO60532
 ID ADO60532 standard; DNA; 21 BP.
 XX
 AC ADO60532;
 XX
 DT 15-JUL-2004 (first entry)
 XX
 DE Human TKA-1 cDNA, primer setTKA-1ctg.as1.
 XX
 KW Blood-brain barrier-specific protein; BBB; endothelial cell;
 KW brain capillary; brain microvessel endothelial cell; BMEC;
 KW substance transport; TKA-1; human; primer; ss.
 OS Homo sapiens.
 XX
 PN DE10242016-A1.
 XX
 PD 25-MAR-2004.
 XX
 PF 11-SEP-2002; 2002DE-01042016.
 XX
 PR 11-SEP-2002; 2002DE-01042016.
 XX
 PA (ESPL-) ESPLORA GMBH C/O TU DARMSTADT INST BIOCH.
 XX
 PI Wolf S, Jaeger M, Bangsow T, Bangsow C, Jordan D, Pelzer B;
 PI Oppolzer T;
 XX
 DR WPI; 2004-331444/31.
 XX
 PT Identifying blood-brain barrier protein, useful e.g. as drug transporter
 PT and for treatment or diagnosis, by subtractive hybridization using cDNA
 PT from brain capillary cells.
 XX
 PS Example 6; SEQ ID NO 31; 63pp; German.
 XX
 CC The present invention relates to a method for identifying a BBB (blood-
 CC brain barrier)-specific protein, or its fragment, in endothelial cells of
 CC brain capillaries (brain microvessel endothelial cells, BMEC). The method
 CC comprises conventional pre-purification of BMEC, freshly isolated from
 CC the brain by enzymatic digestion, treating the digest with a lysis buffer
 CC that destroys erythrocytes and apoptotic cells but retains at least 70%
 CC of BMEC in viable form, optionally further purification of the product,
 CC performing subtractive cDNA libraries from BMEC and a subtractive tissue,
 CC verifying clones from the subtracted cDNA banks with respect to
 CC expression, completing BBB-specific cDNA clones, and comparing expression
 CC patterns of the selected clones between fresh and cultured BMEC to
 CC identify BBB proteins or their fragments. The method is useful for
 CC identifying BBB-specific proteins which are useful for transporting
 CC substances across the blood-brain barrier and for treatment and diagnosis
 CC of diseases (none indicated) associated with dysfunction of this barrier.
 CC The method is simple, is performed under mild conditions and provides
 CC unambiguous identification of proteins that are produced, predominantly
 CC or exclusively, in brain microvessel endothelial cells and are specific
 CC for the BBB. The present sequence represents a primer used in the
 CC examples of the present invention.
 XX
 SQ Sequence 21 BP; 4 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;

```
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1007 TGCACAGATCTCCGCTTC 1026
   ||| ||||| |||||
Db 2 TGCTGAAGATCTCAGCTTC 21

RESULT 1454
ADP83654/c
ID ADP83654 standard; RNA; 21 BP.
XX
AC ADP83654;
XX
DT 09-SEP-2004 (first entry)
XX
DE Poly-DNP-RNA-21 5-base mismatched strand oligoribonucleotide SEQ ID NO:9.
XX
KW ss; oligoribonucleotide; RI-alpha subunit; protein kinase A; cytostatic;
XX antisense therapy; cancer.
XX
OS Synthetic.
XX
PN WO2004053073-A2.
XX
PD 24-JUN-2004.
XX
PF 05-DEC-2003; 2003WO-US038673.
XX
PR 05-DEC-2002; 2002US-0431594P.
XX
PA (UYN Y) UNIV NEW YORK STATE RES FOUND.
XX
PI Wang JH, Shen L, Chen X;
XX WPI; 2004-468845/44.
XX
DR New antisense oligoribonucleotides capable of down-regulating the
PT expression of the RI-alpha subunit of protein kinase A, useful for
PT reducing growth of cancer cells.
XX
PS Example 2; SEQ ID NO 9; 49pp; English.
XX
SQ The invention relates to a novel oligoribonucleotide of about 21-30
CC nucleotides comprising a contiguous sequence of 21 bp fully defined in
CC the specification (ADP83646) or a sequence which has one-base mismatch
CC with ADP83646, where the ribose residue of at least one nucleotide is
CC protected at the 2'-O- position by 2, 4-dinitrophenyl (DNP) and where the
CC oligoribonucleotide is capable of down-regulating the expression of the
CC RI-alpha subunit of protein kinase A. An oligoribonucleotide of the
CC invention has cytostatic activity, and may have a use in antisense
CC therapy. The oligoribonucleotides are useful for down-regulating the
CC expression of the RI-alpha subunit of protein kinase A, reducing growth
CC of cells expressing RI-alpha/PKA, detecting overexpression of the RI-
CC alpha/PKA gene and reducing growth of cancer cells. The present sequence
CC represents an oligoribonucleotide of the invention.
XX
SQ Sequence 21 BP; 4 A; 7 C; 7 G; 0 T; 3 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 885 CAGTGTGTATGCAGGCATCC 904
   ||| ||||| ||||| |||
Db 20 CTGTGTGGATGCAGGCACCC 1

RESULT 1455
ADP48126
ID ADP48126 standard; RNA; 21 BP.
XX
AC ADP48126;
XX
```

```
DT 09-SEP-2004 (first entry)
XX
DE Human MRCK1 sense strand siRNA sequence SeqID161.
XX
KW protein kinase; MRCK1; myotonic dystrophy kinase; Cdc42 binding kinase;
XX MRCK; kinase-related disease; short inhibitory RNA; siRNA; human; ss.
XX
OS Homo sapiens.
XX
PN WO2004050831-A2.
XX
PD 17-JUN-2004.
XX
PF 07-NOV-2003; 2003WO-US035609.
XX
PR 27-NOV-2002; 2002US-0429381P.
XX
PA (AMHP ) WYETH.
XX (LIUW/) LIU W.
XX (WULL/) WU L.
XX
PI Liu W, Wu L;
XX
PD WPI; 2004-461109/43.
XX
PT New human protein kinase MRCK1 with 65% sequence homology to rat myotonic
PT dystrophy kinase-related Cdc42-binding kinase (MRCK), useful in
PT diagnostics and as a drug target.
XX
PS Disclosure; SEQ ID NO 161; 92pp; English.
XX
SQ This invention relates to a novel isolated polynucleotide comprising a
CC nucleic acid sequence, the human MRCK1 gene located at position 11q13,
CC and the novel human protein kinase MRCK1 encoded by it. The sequence of
CC the invention has sequence homology to rat myotonic dystrophy kinase-
CC related Cdc42 binding kinase (MRCK). The invention may be useful for
CC diagnosing, prognosing, and treating kinase-related diseases, preferably
CC diseases associated with aberrant expression of MRCK1. The present
CC sequence is that of a short inhibitory (siRNA) sequence which is targeted
CC towards the human MRCK1 gene and which is related to the invention. Note:
CC The sequence data for this patent did not form part of the printed
CC specification but was obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 21 BP; 4 A; 5 C; 5 G; 0 T; 7 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 21;
Best Local Similarity 65.0%; Pred. No. 1.6e+03;
Matches 13; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

QY 2046 CGACGAGTACCTGGACCTGT 2065
   ||| ||||| ||||| |||
Db 1 CGAGGAGUACCUAGUACCUUU 20

RESULT 1456
ADP48254
ID ADP48254 standard; DNA; 21 BP.
XX
AC ADP48254;
XX
DT 09-SEP-2004 (first entry)
XX
DE Human MRCK1 siRNA target DNA sequence SeqID289.
XX
KW protein kinase; MRCK1; myotonic dystrophy kinase; Cdc42 binding kinase;
XX MRCK; kinase-related disease; short inhibitory RNA; siRNA; ds; human.
XX
OS Homo sapiens.
XX
PN WO2004050831-A2.
XX
PD 17-JUN-2004.
```

XX 07-NOV-2003; 2003WO-US035609.
 PF 27-NOV-2002; 2002US-0429381P.
 PR (AMHP) WYETH.
 XX (LIUW/) LIU W.
 PA (WULL/) WU L.
 PA Liu W, Wu L;
 PI WPI; 2004-461109/43.
 XX New human protein kinase MRCK1 with 65% sequence homology to rat myotonic
 XX dystrophy kinase-related Cdc42-binding kinase (MRCK), useful in
 XX diagnostics and as a drug target.
 XX Disclosure; SEQ ID NO 289; 92pp; English.
 XX This invention relates to a novel isolated polynucleotide comprising a
 XX nucleic acid sequence, the human MRCK1 gene located at position 11q13,
 XX and the novel human protein kinase MRCK1 encoded by it. The sequence of
 XX the invention has sequence homology to rat myotonic dystrophy kinase-
 XX related Cdc42 binding kinase (MRCK). The invention may be useful for
 XX diagnosing, prognosing, and treating kinase-related diseases, preferably
 XX diseases associated with aberrant expression of MRCK1. The present
 XX sequence is that of a DNA sequence which is part of the human MRCK1 gene
 XX which may be a target for a short inhibitory (siRNA) sequence and which
 XX is related to the invention. Note: The sequence data for this patent did
 XX not form part of the printed specification but was obtained in electronic
 XX format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 21 BP; 5 A; 3 C; 8 G; 5 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1354 GAGATGATGAAGATGATCGG 1373
 DB 1 GAGATCTTGAAGGTGATCGG 20
 RESULT 1457
 ADP48119
 ID ADP48119 standard; DNA; 21 BP.
 AC ADP48119;
 XX 09-SEP-2004 (first entry)
 DT Human MRCK1 siRNA target DNA sequence SeqID154.
 DE protein kinase; MRCK1; myotonic dystrophy kinase; Cdc42 binding kinase;
 KW MRCK; kinase-related disease; short inhibitory RNA; siRNA; ds; human.
 XX Homo sapiens.
 OS WO2004050831-A2.
 XX 17-JUN-2004.
 PD 07-NOV-2003; 2003WO-US035609.
 PF 27-NOV-2002; 2002US-0429381P.
 PR (AMHP) WYETH.
 XX (LIUW/) LIU W.
 PA (WULL/) WU L.
 PA Liu W, Wu L;
 PI WPI; 2004-461109/43.
 XX

XX New human protein kinase MRCK1 with 65% sequence homology to rat myotonic
 PT dystrophy kinase-related Cdc42-binding kinase (MRCK), useful in
 PT diagnostics and as a drug target.
 XX Disclosure; SEQ ID NO 154; 92pp; English.
 XX This invention relates to a novel isolated polynucleotide comprising a
 CC nucleic acid sequence, the human MRCK1 gene located at position 11q13,
 CC and the novel human protein kinase MRCK1 encoded by it. The sequence of
 CC the invention has sequence homology to rat myotonic dystrophy kinase-
 CC related Cdc42 binding kinase (MRCK). The invention may be useful for
 CC diagnosing, prognosing, and treating kinase-related diseases, preferably
 CC diseases associated with aberrant expression of MRCK1. The present
 CC sequence is that of a DNA sequence which is part of the human MRCK1 gene
 CC which may be a target for a short inhibitory (siRNA) sequence and which
 CC is related to the invention. Note: The sequence data for this patent did
 CC not form part of the printed specification but was obtained in electronic
 CC format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 21 BP; 5 A; 3 C; 8 G; 5 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1354 GAGATGATGAAGATGATCGG 1373
 DB 1 GAGATCTTGAAGGTGATCGG 20
 RESULT 1458
 ADQ58920
 ID ADQ58920 standard; DNA; 21 BP.
 XX ADQ58920;
 AC ADQ58920;
 XX 23-SEP-2004 (first entry)
 DT Yin yang-1 (YY-1) associated primer #28.
 DE antidiabetic; immunosuppressive; cytostatic; Yin Yang-1;
 KW transcription factor; type 1 diabetes; transgenic; diabetes;
 KW multifunctional transcription factor; type 2 diabetes;
 KW autoimmune disease; cancer; mineral metabolism disorder;
 KW lipid metabolism disorder; rat; YY-1; PCR; primer; ss.
 XX Rattus norvegicus.
 OS WO2004056857-A2.
 XX 08-JUL-2004.
 PD 19-DEC-2003; 2003WO-EP014762.
 PF 20-DEC-2002; 2002DE-01061650.
 PR (UYGR) UNIV GREIFSWALD.
 XX Kloeting I, Kloeting N;
 PI WPI; 2004-507695/48.
 XX New variant of the Yin Yang-1 transcription factor, useful for treating
 PT e.g. diabetes and autoimmune disease, also for diagnosing predisposition
 PT and in screening for therapeutic agents.
 XX Disclosure; Fig 11; 193pp; German.
 XX The invention describes a protein variant of the Yin Yang-1 transcription
 CC factor (I), having a 411 amino acid (aa) sequence (4) reproduced. Also
 CC described are: protein (Ia) that is a homologue of (4) and includes Arg a
 CC position 303 and Lys at position 311; peptide (II) that is a fragment of


```

XX DT 23-MAY-2001 (first entry)
XX DE CD40L poly-A tract sequence SEQ ID NO:32.
XX KW Human; CD40L; promoter; CD40 ligand promoter; rheumatoid arthritis;
XX KW diagnosis; antiarthritic; antirheumatic; immunosuppressive;
XX KW antiinflammatory; inflammatory disease; autoimmune disease; ds.
XX OS Homo sapiens.
XX PN WO200119844-A1.
XX PD 22-MAR-2001.
XX PF 13-SEP-2000; 2000WO-US024966.
XX PR 13-SEP-1999; 99US-0153625P.
XX PA (NYRE-) NEW YORK SOC RELIEF RUPTURED & CRIPPLED.
XX PI Crow MK, Li Y;
XX DR WPI; 2001-244776/25.
XX PT New altered CD40L promoter for use in the study, diagnosis and treatment
XX PT of a variety of inflammatory disorders and autoimmune diseases, such as
XX PT rheumatoid arthritis.
XX PS Example 1; Fig 3; 90pp; English.
XX CC The present invention describes an isolated, purified nucleic acid, which
XX CC is an altered CD40 ligand (CD40L) promoter (I) for CD40 ligand, having
XX CC residues 331-455 of the sequence comprising 455 nucleotides given in
XX CC AAF74905 where A in the wild type sequence at position 331 (corresponding
XX CC to position -125) is replaced with C. (I) has antiarthritic,
XX CC antirheumatic, immunosuppressive and antiinflammatory activities, and can
XX CC be used in gene therapy. (I) is useful in the study, diagnosis and
XX CC treatment of inflammatory and autoimmune diseases, as well as diseases in
XX CC which elevated expression of CD40L is a factor, e.g., rheumatoid
XX CC arthritis. The present sequence represents a CD40L poly-A tract sequence
XX CC which is used in an example from the present invention
XX SQ Sequence 29 BP; 23 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 29;
Best Local Similarity 71.4%; Pred. No. 2.1e+03;
Matches 20; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

OY 3258 AGATATTTTATTTGCTTTGTCCTTTT 3285
Db ||| ||| ||| ||| ||| ||| ||| |||
28 AAGGTTTTTGTGTTTTTTTTTTTTTTT 1

RESULT 1464
AAF74921/C
ID AAF74921 standard; DNA; 29 BP.
XX AC AAF74921;
XX DT 23-MAY-2001 (first entry)
XX DE CD40L poly-A tract sequence SEQ ID NO:18.
XX KW Human; CD40L; promoter; CD40 ligand promoter; rheumatoid arthritis;
XX KW diagnosis; antiarthritic; antirheumatic; immunosuppressive;
XX KW antiinflammatory; inflammatory disease; autoimmune disease; ds.
XX OS Homo sapiens.
XX PN WO200119844-A1.
XX PD 22-MAR-2001.
XX PF 13-SEP-2000; 2000WO-US024966.
XX PR 13-SEP-1999; 99US-0153625P.
XX PA (NYRE-) NEW YORK SOC RELIEF RUPTURED & CRIPPLED.
XX PI Crow MK, Li Y;
XX DR WPI; 2001-244776/25.
XX PT New altered CD40L promoter for use in the study, diagnosis and treatment
XX PT of a variety of inflammatory disorders and autoimmune diseases, such as
XX PT rheumatoid arthritis.
XX PS Example 1; Fig 3; 90pp; English.
XX CC The present invention describes an isolated, purified nucleic acid, which
XX CC is an altered CD40 ligand (CD40L) promoter (I) for CD40 ligand, having
XX CC residues 331-455 of the sequence comprising 455 nucleotides given in
XX CC AAF74905 where A in the wild type sequence at position 331 (corresponding
XX CC to position -125) is replaced with C. (I) has antiarthritic,
XX CC antirheumatic, immunosuppressive and antiinflammatory activities, and can
XX CC be used in gene therapy. (I) is useful in the study, diagnosis and
XX CC treatment of inflammatory and autoimmune diseases, as well as diseases in
XX CC which elevated expression of CD40L is a factor, e.g., rheumatoid
XX CC arthritis. The present sequence represents a CD40L poly-A tract sequence
XX CC which is used in an example from the present invention
XX SQ Sequence 29 BP; 23 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 29;
Best Local Similarity 71.4%; Pred. No. 2.1e+03;
Matches 20; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

OY 3258 AGATATTTTATTTGCTTTGTCCTTTT 3285
Db ||| ||| ||| ||| ||| ||| ||| |||
28 AAGGTTTTTGTGTTTTTTTTTTTTTTT 1

RESULT 1464
AAF74921/C
ID AAF74921 standard; DNA; 29 BP.
XX AC AAF74921;
XX DT 23-MAY-2001 (first entry)
XX DE CD40L poly-A tract sequence SEQ ID NO:18.
XX KW Human; CD40L; promoter; CD40 ligand promoter; rheumatoid arthritis;
XX KW diagnosis; antiarthritic; antirheumatic; immunosuppressive;
XX KW antiinflammatory; inflammatory disease; autoimmune disease; ds.
XX OS Homo sapiens.
XX PN WO200119844-A1.
XX PD 22-MAR-2001.

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XX PF 13-SEP-2000; 2000WO-US024966.
XX PR 13-SEP-1999; 99US-0153625P.
XX PA (NYRE-) NEW YORK SOC RELIEF RUPTURED & CRIPPLED.
XX PI Crow MK, Li Y;
XX DR WPI; 2001-244776/25.
XX PT New altered CD40L promoter for use in the study, diagnosis and treatment
XX PT of a variety of inflammatory disorders and autoimmune diseases, such as
XX PT rheumatoid arthritis.
XX PS Example 1; Fig 3; 90pp; English.
XX CC The present invention describes an isolated, purified nucleic acid, which
XX CC is an altered CD40 ligand (CD40L) promoter (I) for CD40 ligand, having
XX CC residues 331-455 of the sequence comprising 455 nucleotides given in
XX CC AAF74905 where A in the wild type sequence at position 331 (corresponding
XX CC to position -125) is replaced with C. (I) has antiarthritic,
XX CC antirheumatic, immunosuppressive and antiinflammatory activities, and can
XX CC be used in gene therapy. (I) is useful in the study, diagnosis and
XX CC treatment of inflammatory and autoimmune diseases, as well as diseases in
XX CC which elevated expression of CD40L is a factor, e.g., rheumatoid
XX CC arthritis. The present sequence represents a CD40L poly-A tract sequence
XX CC which is used in an example from the present invention
XX SQ Sequence 29 BP; 23 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 29;
Best Local Similarity 71.4%; Pred. No. 2.1e+03;
Matches 20; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

OY 3258 AGATATTTTATTTGCTTTGTCCTTTT 3285
Db ||| ||| ||| ||| ||| ||| ||| |||
28 AAGGTTTTTGTGTTTTTTTTTTTTTTT 1

RESULT 1465
AAF74928/C
ID AAF74928 standard; DNA; 29 BP.
XX AC AAF74928;
XX DT 23-MAY-2001 (first entry)
XX DE CD40L poly-A tract sequence SEQ ID NO:25.
XX KW Human; CD40L; promoter; CD40 ligand promoter; rheumatoid arthritis;
XX KW diagnosis; antiarthritic; antirheumatic; immunosuppressive;
XX KW antiinflammatory; inflammatory disease; autoimmune disease; ds.
XX OS Homo sapiens.
XX PN WO200119844-A1.
XX PD 22-MAR-2001.
XX PF 13-SEP-2000; 2000WO-US024966.
XX PR 13-SEP-1999; 99US-0153625P.
XX PA (NYRE-) NEW YORK SOC RELIEF RUPTURED & CRIPPLED.
XX PI Crow MK, Li Y;
XX DR WPI; 2001-244776/25.
XX PT New altered CD40L promoter for use in the study, diagnosis and treatment
XX PT of a variety of inflammatory disorders and autoimmune diseases, such as
XX PT rheumatoid arthritis.

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QY 3258 AAGATATTTATTTGCTTTGTCCTTTT 3285
DB 29 AAGGTTTTTGTGTTTTTTTTTTTTTTTTT 2

RESULT 1468
AAQ43973
ID AAQ43973 standard; DNA; 32 BP.
XX
AC AAQ43973;
XX
DT 25-MAR-2003 (revised)
DT 28-OCT-1993 (first entry)
XX
DE Triple helix forming oligonucleotide I.
KW Purine; pyrimidine; tracts; intramolecular triplex; therapeutic;
KW diagnostic; control; gene expression; mRNA synthesis suppression; ss.
XX
OS Synthetic.
XX
PN WO9312230-A1.
XX
PD 24-JUN-1993.
XX
PF 11-DEC-1992; 92WO-US010792.
XX
PR 13-DEC-1991; 91US-00808452.
PR 21-JAN-1992; 92US-00826934.
XX
PA (STRI ) SRI INT.
XX
PI Jayaasena SD, Johnston BH;
XX
DR WPI; 1993-214172/26.
XX
PT New oligo:nucleotide(s) forming triple helix with target nucleic acid -
PT contain purine and pyrimidine tracts in specific orientations, useful
PT therapeutically or diagnostically e.g. for inactivating HIV RNA, etc.
XX
PS Disclosure; Page 47; 101pp; English.
XX
CC The sequence is that of an oligonucleotide, I, which is able to form a
CC triple helix with a duplex nucleic acid (dsNA) contg. a target sequence
CC which comprises at least one pyrimidine tract, and at least one adjacent
CC purine tract. It is useful for therapeutic or diagnostic control of gene
CC expression, e.g. suppression of mRNA synthesis from a target gene. A
CC specified application is targetting of RNA in the HIV-1 genome. When
CC appropriately labelled it may also be used as a probe. Attachment of
CC cleavage agents caused permanent inactivation of the target by site-
CC specific cleavage. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 32 BP; 8 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 32;
Best Local Similarity 71.4%; Pred. No. 2.3e+03;
Matches 20; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 3258 AAGATATTTATTTGCTTTGTCCTTTT 3285
DB 3 AAAAAATTTTTTTTTTTTTTTTTTTTTTTT 30

RESULT 1469
ADL33740
ID ADL33740 standard; DNA; 35 BP.
XX
AC ADL33740;
XX
DT 03-JUN-2004 (first entry)
XX
DE LNA capture probe #3.

QY 3258 AAGATATTTATTTGCTTTGTCCTTTT 3285
DB 29 AAGGTTTTTGTGTTTTTTTTTTTTTTTTT 2

RESULT 1470
AAL07488/C
ID AAL07488 standard; DNA; 38 BP.
XX
AC AAL07488;
XX
DT 21-NOV-2001 (first entry)
XX
DE Human reproductive system related antigen DNA SEQ ID NO: 10176.

XX KW Detection; isolation; locked nucleic acid; LNA; probe; ss.
XX OS Synthetic.
XX FH Location/Qualifiers
FT modified_base 1..15
FT /*tag= b
FT /mod_base= OTHER
FT /note= "10-mer deoxy-thymine and 5-mer non-base (t10-
FT NB5)"
FT modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT modified_base 16..35
FT /*tag= c
FT /mod_base= OTHER
FT /note= "Optionally LNA nucleotides"
XX PN WO2004020575-A2.
XX 11-MAR-2004.
XX 20-JUN-2003; 2003WO-IB006354.
XX 24-JUN-2002; 2002US-0390928P.
XX (EXIQ-) EXIQON AS.
XX Kauppinen S, Jacobsen N;
XX WPI; 2004-315512/29.
XX Detecting and/or isolating nucleic acid molecule having homopolymeric
XX sequence or repetitive element or conserved nucleotide sequence involves
XX treating sample containing nucleic acid compounds with locked nucleic
XX acid oligonucleotide.
XX Claim 23; Page 67; 104pp; English.
XX The present invention relates to a method (M1) for detecting and/or
XX isolating a nucleic acid having a homopolymeric sequence or repetitive
XX element or conserved nucleotide sequence. (M1) comprises treating a
XX sample containing nucleic acid compounds with an locked nucleic acid
XX (LNA) oligonucleotide (LO) to thereby detect and/or isolate a nucleic
XX acid having the homopolymeric sequence or repetitive element or conserved
XX nucleotide sequence. (M1) is useful for detecting and isolating nucleic
XX acids released from a lysed complex biological mixture comprising nucleic
XX acids. The present sequence is a LNA capture probe, used to illustrate
XX the invention.
XX Sequence 35 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 5 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 35;
Best Local Similarity 68.0%; Pred. No. 2.4e+03;
Matches 17; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 3310 TTTTCTTTTAGGAGATTTATTTT 3334
DB 1 TTTTTTTTTNNNNNTTTTTTTTTT 25

RESULT 1470
AAL07488/C
ID AAL07488 standard; DNA; 38 BP.
XX
AC AAL07488;
XX
DT 21-NOV-2001 (first entry)
XX
DE Human reproductive system related antigen DNA SEQ ID NO: 10176.
XX
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KW Human; reproductive system related antigen; reproductive system disorder;
KW cancer; gene therapy; ds.
XX Homo sapiens.

OS
PN WO200155320-A2.
XX
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001339.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226686P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 13-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246521P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246603P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.

AC AAQ33681;
 XX 25-MAR-2003 (revised)
 DT 02-FEB-1993 (first entry)
 XX
 DE Microsatellite sequence from clone TGLA122.
 XX PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
 KW genetic mapping; traits; amplification; ss.
 XX
 OS Bos taurus.
 XX
 XX WO9213102-A1.
 XX
 XX 06-AUG-1992.
 XX
 XX 15-JAN-1992; 92WO-US000340.
 XX
 XX 15-JAN-1991; 91US-00642342.
 XX
 XX (GENM-) GENMARK.
 XX
 XX Georges M, Massey JM;
 XX WPI; 1992-284684/34.
 XX
 XX Polymorphic bovine DNA markers - used in genetic identification, gene
 PT mapping, and selective breeding.
 XX
 XX Table 7; Page 202; 517pp; English.
 XX
 XX The sequence is that of a bovine microsatellite sequence obt'd. by
 CC screening a library of bovine MboI DNA fragments of between 250 and 500
 CC bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
 CC clones cross-hybridised. Assuming independent distribution of
 CC microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
 CC in the bovine genome is estimated at >100, 000. The sequence information
 CC for ca. 230 such bovine microsatellites is summarised in the
 CC specification and indexed herein (see below). The sequences upstream and
 CC downstream of the microsatellite sequence were used to generate the
 CC required PCR primers for in vitro amplification of the corresp.
 CC microsatellite (using the program OPTIPRIM). The microsatellites may be
 CC used to identify individuals, for parentage testing, and in the genetic
 CC mapping of economic trait loci, or genes involved in the determination of
 CC economically important traits esp. in cattle, to allow selective
 CC breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
 CC field.)
 XX
 XX Sequence 41 BP; 6 A; 0 C; 15 G; 20 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 41;
 Best Local Similarity 85.0%; Pred. No. 2.6e+03;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2824 ATATATACATATATATATAT 2843
 DB 20 ACACACACATATATATATAT 1
 RESULT 1474
 AAQ33764
 ID AAQ33764 standard; DNA; 15 BP.
 XX
 XX AAQ33764;
 XX
 XX 25-MAR-2003 (revised)
 DT 02-FEB-1993 (first entry)
 XX
 XX Microsatellite sequence from clone TGLA171.
 XX PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
 KW genetic mapping; traits; amplification; ss.
 XX

OS Bos taurus.
 XX WO9213102-A1.
 XX
 XX 06-AUG-1992.
 XX
 XX 15-JAN-1992; 92WO-US000340.
 XX
 XX 15-JAN-1991; 91US-00642342.
 XX
 XX (GENM-) GENMARK.
 XX
 XX Georges M, Massey JM;
 XX WPI; 1992-284684/34.
 XX
 XX Polymorphic bovine DNA markers - used in genetic identification, gene
 PT mapping, and selective breeding.
 XX
 XX Table 7; Page 235; 517pp; English.
 XX
 XX The sequence is that of a bovine microsatellite sequence obt'd. by
 CC screening a library of bovine MboI DNA fragments of between 250 and 500
 CC bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
 CC clones cross-hybridised. Assuming independent distribution of
 CC microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
 CC in the bovine genome is estimated at >100, 000. The sequence information
 CC for ca. 230 such bovine microsatellites is summarised in the
 CC specification and indexed herein (see below). The sequences upstream and
 CC downstream of the microsatellite sequence were used to generate the
 CC required PCR primers for in vitro amplification of the corresp.
 CC microsatellite (using the program OPTIPRIM). The microsatellites may be
 CC used to identify individuals, for parentage testing, and in the genetic
 CC mapping of economic trait loci, or genes involved in the determination of
 CC economically important traits esp. in cattle, to allow selective
 CC breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
 CC field.)
 XX
 XX Sequence 15 BP; 0 A; 0 C; 8 G; 7 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2319 GTGTGTGTGTGTGTGTG 2333
 DB 1 GTGTGTGTGTGTGTG 15
 RESULT 1475
 AAH46010
 ID AAH46010 standard; DNA; 15 BP.
 XX
 XX AAH46010;
 XX
 XX 12-SEP-2001 (first entry)
 DT
 XX
 XX Synthetic oligonucleotide 10.
 XX
 XX Synthetic oligonucleotide; dinucleotide repeat; cytostatic; apoptosis;
 KW cell cycle arrest; cell proliferation; caspase; cytokine; interleukin;
 KW tumour necrosis factor; TNF; cancer; carcinoma; sarcoma; leukemia;
 KW lymphoma; ss.
 XX
 XX Synthetic.
 XX
 XX WO200144465-A2.
 XX
 XX 21-JUN-2001.
 PD
 XX
 XX 12-DEC-2000; 2000WO-CA001467.
 PF
 XX
 XX 13-DEC-1999; 99US-0170325P.
 PR

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PR 29-AUG-2000; 2000US-0228925P.
XX (BION-) BIONICHE LIFE SCI INC.
XX Phillips NC, Fillion MC;
XX WPI; 2001-398150/42.
XX Composition comprising synthetic oligonucleotides which comprise multiple
XX repeats of dinucleotides such as GT, TG useful for treating cancer by
XX inducing cell cycle arrest, inhibiting proliferation, activating
XX caspases.
XX Claim 5; Page 17; 77pp; English.
XX The present sequence is that of a synthetic oligonucleotide useful to the
XX invention. The invention relates to a composition, comprising a 2 to 20
XX base 3'-OH, 5'-OH synthetic oligonucleotide which comprises multiple
XX repeats of dinucleotides such as GT, TG, etc., according to specific
XX formula and having cytostatic activity. The oligonucleotide compositions
XX are useful for inducing cell cycle arrest, inhibition of proliferation,
XX activation of caspases and induction of apoptosis or production of
XX cytokines such as interleukin (IL)-1-beta, IL-6, IL-10, IL-12 and tumour
XX necrosis factor (TNF)-alpha by immune system cells, in an animal having
XX cancer such as primary carcinoma, secondary carcinoma, primary sarcoma
XX and secondary sarcoma such as, leukemia, lymphoma, breast, prostate,
XX colorectal, ovarian or bone cancer. The compositions induce apoptosis
XX independent of Fas, p53/p21, p21/waf-1/CIP, p15(ink4B), p16(ink4), drug
XX resistance, caspase 3, transforming growth factor (TGF)-beta 1 receptor
XX and hormone dependence
XX
XX Sequence 15 BP; 0 A; 0 C; 8 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2319 GTGTGTGTGTGTGTGTG 2333
DB 1 GTGTGTGTGTGTGTGTG 15
RESULT 1476
ADC13343
ID ADC13343 standard; DNA; 15 BP.
XX
XX ADC13343;
XX
XX DT 18-DEC-2003 (first entry)
XX
XX DE KS3 and KS4 SAGE library over-expression showing tag, SEQ ID No 10.
XX
XX marker gene; tumour; Kaposi's Sarcoma; peripheral blood mononuclear cell;
XX pBMC; expressed keratin 14; TIE 1; Sialoadhesin; Siglec 1; angiogenesis;
XX drug target; tag; SAGE library; KS3; KS4; ss.
XX Unidentified.
XX
XX OS EP1298221-A1.
XX
XX PN 02-APR-2003.
XX
XX PD 28-SEP-2001; 2001EP-00203703.
XX
XX PF 28-SEP-2001; 2001EP-00203703.
XX
XX PR (PRIM-) PRIMAGEN HOLDING BV.
XX
XX PA Van Der Kuyl AC, Cornelissen M;
XX
XX PI WPI; 2003-589342/56.
XX
XX DR Determining whether a treatment is effective in changing a status of a
XX PT

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PT certain set of target cells in an individual comprises determining
PT whether the sample comprises an expression product of at least one marker
PT gene.
XX Disclosure; SEQ ID NO 10; 94pp; English.
XX
XX The invention relates to a novel method for determining whether a
XX treatment is effective in changing a status of a certain set of target
XX cells in an individual. The method comprises obtaining a sample from an
XX individual after initiation of the treatment; and determining whether the
XX sample comprises an expression product of at least one marker gene. The
XX marker gene and a proteinaceous molecule (which can bind to the protein
XX derived from the marker gene of the invention) are useful for determining
XX whether a treatment is effective in counteracting a tumour in an
XX individual, especially Kaposi's Sarcoma. Peripheral blood mononuclear
XX cell (PBMNC) expressed keratin 14, TIE 1, Sialoadhesin, or Siglec 1
XX sequences or a fully defined sequence given in the specification, or
XX their analogues are useful as indicators for angiogenesis and for
XX detecting the presence of a tumour cell in an individual. The expression
XX product of a gene comprising a marker gene of the invention is useful as
XX a drug target. The compound is useful for preparing a medicament. This
XX polynucleotide sequence represents a tag sequence which showed over-
XX expression in Kaposi's Sarcoma SAGE libraries KS3 and KS4 of the
XX invention.
XX
XX Sequence 15 BP; 3 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.4%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3704 CATGTGGCCAGAGG 3718
DB 1 CATGTGGCCAGAGG 15
RESULT 1477
ADH70349/C
ID ADH70349 standard; DNA; 15 BP.
XX
XX AC ADH70349;
XX
XX XX 25-MAR-2004 (first entry)
XX
XX DE Human Vbeta gene repeat sequence #139.
XX
XX KW human; T-cell associated disease; Vbeta; autoimmune disease;
XX degenerative nervous system disease; graft versus host disease;
XX hypersensitivity disease; infectious disease; neoplastic disease;
XX Addison's disease; atrophic gastritis;
XX degenerative nervous system disease; multiple sclerosis;
XX Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
XX allergy; type II hypersensitivity; Goodpasture's syndrome;
XX type IV hypersensitivity; leprosy; infectious disease; viral infection;
XX HIV; fungal infection; Candida; parasitic infection; schistosoma;
XX filaria; bacterial infection; Mycobacterium; neoplastic disease;
XX lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
XX breast cancer; ds.
XX
XX OS Homo sapiens.
XX
XX PN US2002150891-A1.
XX
XX PD 17-OCT-2002.
XX
XX PF 05-MAR-1999; 99US-00263959.
XX
XX PR 19-SEP-1994; 94US-00309335.
XX
XX PR 19-SEP-1995; 95US-00531241.
XX
XX XX (HOOD/) HOOD L E.
XX
XX PA (HOWE/) ROWEN L.
XX
XX PT

```

PI Hood LE, Rowen L;
 XX WPI; 2004-059052/06.
 XX
 XX Kit for diagnosing and treating T-cell associated diseases e.g.
 XX autoimmune, degenerative nervous system and infectious disease, comprises
 XX nucleic acid primers specifically priming and allowing amplification of a
 XX Vbeta gene.
 XX
 XX Disclosure; SEQ ID NO 543; 164pp; English.
 XX
 XX The invention relates to a kit for diagnosing and treating T-cell
 XX associated diseases which comprises a panel of nucleic acid primers
 XX specifically priming and allowing amplification of each Vbeta gene,
 XX VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
 XX rejection and diagnosing and treating T-cell associated diseases
 XX including autoimmune diseases, degenerative nervous system diseases,
 XX graft versus host disease, hypersensitivity diseases, infectious diseases,
 XX and neoplastic diseases. Autoimmune diseases include Addison's disease,
 XX atrophic gastritis. Degenerative nervous system diseases include multiple
 XX sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
 XX I hypersensitivities such as contact with allergens that lead to
 XX allergies, Type II hypersensitivities such as those present in
 XX Goodpasture's syndrome and Type IV hypersensitivities such as those
 XX manifested in leprosy. Infectious diseases include viral infections
 XX caused by viruses such as HIV, fungal infections such as those caused by
 XX the yeast genus Candida, parasitic infections such as those caused by
 XX schistosomes, filaria and bacterial infections such as those caused by
 XX Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 XX such as leukaemias, lymphomas and cancers such as cancer of the brain,
 XX breast. The present sequence represents a Vbeta gene repeat sequence.
 XX
 XX Sequence 15 BP; 7 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
 XX
 XX Query Match 0.4%; Score 15; DB 1; Length 15;
 XX Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 2823 TATATATACATATAT 2837
 DB 15 TATATATACATATAT 1
 |||||
 RESULT 1478
 ADH70351/c
 ID ADH70351 standard; DNA; 15 BP.
 XX
 XX ADH70351;
 XX
 XX 25-MAR-2004 (first entry)
 XX
 XX Human Vbeta gene repeat sequence #141.
 XX
 XX human; T-cell associated disease; Vbeta; autoimmune disease;
 XX degenerative nervous system disease; graft versus host disease;
 XX hypersensitivity disease; infectious disease; neoplastic disease;
 XX Addison's disease; atrophic gastritis;
 XX degenerative nervous system disease; multiple sclerosis;
 XX Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
 XX allergy; type II hypersensitivity; Goodpasture's syndrome;
 XX type IV hypersensitivity; leprosy; infectious disease; viral infection;
 XX HIV; fungal infection; Candida; parasitic infection; schistosome;
 XX filaria; bacterial infection; Mycobacterium; neoplastic disease;
 XX lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
 XX breast cancer; ds.
 XX
 XX Homo sapiens.
 XX
 XX US2002150891-A1.
 XX
 XX 17-OCT-2002.
 XX
 XX 05-MAR-1999; 99US-00263959.

XX
 PR 19-SEP-1994; 94US-00309335.
 PR 19-SEP-1995; 95US-00531241.
 XX
 XX (HOOD/) HOOD L E.
 XX (ROWE/) ROWEN L.
 XX
 XX Hood LE, Rowen L;
 XX
 XX WPI; 2004-059052/06.
 XX
 XX Kit for diagnosing and treating T-cell associated diseases e.g.
 XX autoimmune, degenerative nervous system and infectious disease, comprises
 XX nucleic acid primers specifically priming and allowing amplification of a
 XX Vbeta gene.
 XX
 XX Disclosure; SEQ ID NO 545; 164pp; English.
 XX
 XX The invention relates to a kit for diagnosing and treating T-cell
 XX associated diseases which comprises a panel of nucleic acid primers
 XX specifically priming and allowing amplification of each Vbeta gene,
 XX VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
 XX rejection and diagnosing and treating T-cell associated diseases
 XX including autoimmune diseases, degenerative nervous system diseases,
 XX graft versus host disease, hypersensitivity diseases, infectious diseases,
 XX and neoplastic diseases. Autoimmune diseases include Addison's disease,
 XX atrophic gastritis. Degenerative nervous system diseases include multiple
 XX sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
 XX I hypersensitivities such as contact with allergens that lead to
 XX allergies, Type II hypersensitivities such as those present in
 XX Goodpasture's syndrome and Type IV hypersensitivities such as those
 XX manifested in leprosy. Infectious diseases include viral infections
 XX caused by viruses such as HIV, fungal infections such as those caused by
 XX the yeast genus Candida, parasitic infections such as those caused by
 XX schistosomes, filaria and bacterial infections such as those caused by
 XX Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 XX such as leukaemias, lymphomas and cancers such as cancer of the brain,
 XX breast. The present sequence represents a Vbeta gene repeat sequence.
 XX
 XX Sequence 15 BP; 7 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
 XX
 XX Query Match 0.4%; Score 15; DB 1; Length 15;
 XX Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 2823 TATATATACATATAT 2837
 DB 15 TATATATACATATAT 1
 |||||
 RESULT 1479
 ABT34232
 ID ABT34232 standard; DNA; 16 BP.
 XX
 XX ABT34232;
 XX
 XX 12-JUN-2003 (first entry)
 XX
 XX Dopamine-D2-receptor probe SEQ ID No 18.
 XX
 XX Eating disorder; polymorphism; dataset; allele; HGBASE identification;
 XX serotonin receptor ID; delta-opioid receptor; dopamine receptor D2;
 XX anorexia nervosa; bulimia nervosa; probe; ss.
 XX
 XX Unidentified.
 XX
 XX WO2003012143-A1.
 XX
 XX 13-FEB-2003.
 XX
 XX 16-JUL-2002; 2002WO-US022555.
 XX
 XX 16-JUL-2001; 2001US-0305153P.

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PR 20-JUL-2001; 2001US-0306440P.
PR 13-NOV-2001; 2001US-0331285P.
PR 19-DEC-2001; 2001US-0340843P.
PR 19-DEC-2001; 2001US-0340844P.
XX (PRIC-) PRICE FOUND LTD.
XX Bergen AW, Yeager M;
PI WPI; 2003-268122/26.
XX
XX New nucleic acid molecule having polymorphisms in the serotonin receptor
PT ID, delta-opioid receptor, or dopamine receptor D2, useful in diagnostic
PT and prognostic assays for eating disorders, such as anorexia and bulimia
PT nervosa.
XX
XX Example 2; Page 42; 149pp; English.
XX
XX The invention relates to a novel isolated nucleic acid molecule
CC comprising a variant gene associated with an eating disorder and selected
CC from any of 119 polymorphisms with their corresponding genotyping in
CC dataset, alleles and HGBASE identification, given in the specification.
CC The novel nucleic acid molecule has polymorphisms in the serotonin
CC receptor ID, delta-opioid receptor, or dopamine receptor D2, which is
CC useful in diagnostic and prognostic assays for eating disorders, in
CC particular anorexia nervosa and bulimia nervosa. This polynucleotide
CC sequence represents a dopamine D2 receptor probe of the invention
XX
XX Sequence 16 BP; 2 A; 9 C; 3 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.3e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2235 AGCCACCCCTGCTGC 2249
DB 1 AGCCACCCCTGCTGC 15
RESULT 1480
AAT27921/C
ID AAT27921 standard; DNA; 17 BP.
AC AAT27921;
XX
XX 28-JAN-1997 (first entry)
XX
XX 5'-anchored simple sequence repeat primer CGG(CA)6.5.
XX
XX Detection; polymorphism; perfect compound simple sequence repeat;
XX adaptor directed primer; genome; genetic; fingerprinting;
XX amplified fragment length polymorphism assay; microsatellite region;
XX genetic trait marking; germline comparisons; 5'-anchored; ss.
XX
XX Synthetic.
XX
XX WO9617082-A2.
XX
XX 06-JUN-1996.
XX
XX 21-NOV-1995; 95WO-US015150.
XX
XX 28-NOV-1994; 94US-00346456.
XX
XX (DUPO ) DU PONT DE NEMOURS & CO B I.
XX
XX Morgante M, Vogel JM;
XX
XX WPI; 1996-277795/28.
XX
XX Modified amplified fragment length polymorphism assay - for detection of
PT polymorphism esp. in microsatellite regions.
PT
XX

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PS Example 1; Page 77; 173pp; English.
XX
XX Detecting polymorphisms between 2 nucleic acid samples, esp. in
CC microsatellite regions, comprises digesting the nucleic acid to generate
CC fragments, ligating adaptor segments to their ends, amplifying them using
CC primer directed amplification and comparing the prods. to detect
CC differences. The primers used in the amplification comprise a primer
CC consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
CC directed primer, comprising a sequence complementary to an adaptor
CC segment. The present sequence is an example of a SSR primer. The method
CC represents a modified amplified fragment length polymorphism assay, which
CC is partic. useful for genome fingerprinting, i.e. for genetic trait
CC marking and germline comparisons
XX
XX Sequence 17 BP; 7 A; 8 C; 2 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.3e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2320 TGTGTGTGTGTGTGC 2334
DB 17 TGTGTGTGTGTGTGC 3
RESULT 1481
ACN06103
ID ACN06103 standard; RNA; 17 BP.
AC ACN06103;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV Amberzyme substrate SEQ ID NO 6106.
DE
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 6106; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX treating a condition related to WNV infection e.g. pancreatitis,
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX molecule is selected from the group of ribozymes consisting of
XX Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
XX nucleic acid molecules further comprise at least five ribose residues, at

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CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
 CC three of the 5' terminal nucleotides and a 3' end modification of a
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
 CC in the specification. The present sequence is that of a nucleic acid
 CC molecule of the invention

XX
 SQ Sequence 17 BP; 2 A; 6 C; 5 G; 0 T; 4 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 17;
 Best Local Similarity 73.3%; Pred. No. 1.3e+03;
 Matches 11; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1822 CTGCTCTGGGAGATC 1836
 Db 1 CUGCUCUGGAGATC 15

RESULT 1482
 ACN11299/C
 ID ACN11299 standard; RNA; 17 BP.
 XX
 AC ACN11299;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE WNV minus strand Inozyme substrate SEQ ID NO 11302.

XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
 KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
 KW encephalitis; myocarditis; meningitis; infection; hepatitis;
 KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
 KW Amberzyme; Zinzyme; ss.

XX West Nile Virus.
 OS
 XX WO200268637-A2.
 PN
 XX 06-SEP-2002.
 PD
 XX 19-OCT-2001; 2001WO-US048350.
 PF
 XX 20-OCT-2000; 2000US-0242411P.
 FR

XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J A.
 XX Blatt L, Mcswiggen JA;
 PI
 XX WPI; 2002-706994/76.
 DR
 XX New nucleic acid molecule that modulates replication of West Nile Virus
 PT (WNV), useful for treating a condition related to WNV infection e.g.
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
 XX

PS Claim 23; SEQ ID NO 11302; 495pp; English.
 CC The invention relates to nucleic acid molecules that modulate replication
 CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
 CC treating a condition related to WNV infection e.g. pancreatitis,
 CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
 CC molecule is selected from the group of ribozymes consisting of
 CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
 CC nucleic acid molecules further comprise at least five ribose residues, at
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
 CC three of the 5' terminal nucleotides and a 3' end modification of a
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
 CC in the specification. The present sequence is that of a nucleic acid
 CC molecule of the invention

XX

SQ Sequence 17 BP; 4 A; 5 C; 6 G; 0 T; 2 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.3e+03;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1822 CTGCTCTGGGAGATC 1836
 Db 17 CTGCTCTGGGAGATC 3

RESULT 1483
 ACN11300/C
 ID ACN11300 standard; RNA; 17 BP.
 XX
 AC ACN11300;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE WNV minus strand Inozyme substrate SEQ ID NO 11303.

XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
 KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
 KW encephalitis; myocarditis; meningitis; infection; hepatitis;
 KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
 KW Amberzyme; Zinzyme; ss.

XX West Nile Virus.
 OS
 XX WO200268637-A2.
 PN
 XX 06-SEP-2002.
 PD
 XX 19-OCT-2001; 2001WO-US048350.
 PF
 XX 20-OCT-2000; 2000US-0242411P.
 FR

XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J A.
 XX Blatt L, Mcswiggen JA;
 PI
 XX WPI; 2002-706994/76.
 DR
 XX New nucleic acid molecule that modulates replication of West Nile Virus
 PT (WNV), useful for treating a condition related to WNV infection e.g.
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
 XX

PS Claim 23; SEQ ID NO 11303; 495pp; English.
 CC The invention relates to nucleic acid molecules that modulate replication
 CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
 CC treating a condition related to WNV infection e.g. pancreatitis,
 CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
 CC molecule is selected from the group of ribozymes consisting of
 CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
 CC nucleic acid molecules further comprise at least five ribose residues, at
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
 CC three of the 5' terminal nucleotides and a 3' end modification of a
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
 CC in the specification. The present sequence is that of a nucleic acid
 CC molecule of the invention

XX
 SQ Sequence 17 BP; 5 A; 5 C; 5 G; 0 T; 2 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.3e+03;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1822 CTGCTCTGGGAGATC 1836

```
Db      16 CTGCTCTGGGAGATC 2
RESULT 1484
ACN06102
ID      ACN06102 standard; RNA; 17 BP.
XX
AC      ACN06102;
XX
DT      22-APR-2004 (first entry)
XX
DE      WNV Amberzyme substrate SEQ ID NO 6105.
XX
KW      WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW      virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW      encephalitis; myocarditis; meningitis; infection; hepatitis;
KW      liver failure; cancer; cirrhosis; Hammerhead; inozyme; DNazyme;
KW      Amberzyme; Zinzyme; ss.
XX
OS      West Nile Virus.
XX
PN      W0200268637-A2.
XX
PD      06-SEP-2002.
XX
PF      19-OCT-2001; 2001WO-US048350.
XX
PR      20-OCT-2000; 2000US-0242411P.
XX
PA      (RIBO-) RIBOZYME PHARM INC.
PA      (BLAT/) BLATT L.
PA      (MCSW/) MCSWIGGEN J A.
XX
PI      Blatt L, Mcswiggen JA;
XX
DR      WPI; 2002-706994/76.
XX
PT      New nucleic acid molecule that modulates replication of West Nile Virus
PT      (WNV), useful for treating a condition related to WNV infection e.g.
PT      pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS      Claim 23; SEQ ID NO 6105; 495pp; English.
XX
CC      The invention relates to nucleic acid molecules that modulate replication
CC      of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC      treating a condition related to WNV infection e.g. pancreatitis,
CC      encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC      liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC      molecule is selected from the group of ribozymes consisting of
CC      Hammerhead, inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC      nucleic acid molecules further comprise at least five ribose residues, at
CC      least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC      least three of the 5' terminal nucleotides and a 3' end modification of a
CC      3'-3', inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC      are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC      in the specification. The present sequence is that of a nucleic acid
CC      molecule of the invention
XX
SQ      Sequence 17 BP; 2 A; 5 C; 5 G; 0 T; 5 U; 0 Other;
      Query Match      0.4%; Score 15; DB 1; Length 17;
      Best Local Similarity 73.3%; Pred. No. 1.3e+03;
      Matches 11; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY      1822 CTGCTCTGGGAGATC 1836
      |:|:|:|:|:|:|
Db      2 CUGCUCUGGAGAU 16
RESULT 1485
ADA99678
ID      ADA99678 standard; DNA; 17 BP.
XX
KW      Cytostatic; immunostimulant; gene therapy; vaccine; human;
```


XX Mcswiggen J;
 XX WPI; 2003-140484/13.
 XX Novel short interfering RNA and enzymatic nucleic acid useful for
 PT treating cancer, modulates the expression of a nucleic acid encoding
 PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
 XX Claim 58; Page 125; 185pp; English.
 XX The invention relates to a novel short interfering RNA (siRNA) nucleic
 CC acid molecule or an enzymatic nucleic acid molecule, that modulates
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
 CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
 CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
 CC rheumatic activity. The nucleic acid molecules are useful for reducing
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
 CC ribozymes of the invention
 XX Sequence 17 BP; 2 A; 6 C; 5 G; 0 T; 4 U; 0 Other;
 SQ Query Match 0.4%; Score 15; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.3e+03;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1197 GGCGAAGCCCTTGG 1211
 DB 16 GGCGAAGCCCTTGG 2
 RESULT 1489
 AAT27912/C
 ID AAT27912 standard; DNA; 18 BP.
 XX AC AAT27912;
 XX 28-JAN-1997 (first entry)
 XX 5'-anchored simple sequence repeat primer DBD(AC)7.5.
 XX Detection; polymorphism; perfect compound simple sequence repeat;
 KW adaptor directed primer; genome; genetic; fingerprinting;
 KW amplified fragment length polymorphism assay; microsatellite region;
 KW genetic trait marking; germplasm comparisons; 5'-anchored; ss.
 XX Synthetic.
 XX WO9617082-A2.
 XX 06-JUN-1996.
 XX 21-NOV-1995; 95WO-US015150.
 XX 28-NOV-1994; 94US-00346456.
 XX (DUPO) DU PONT DE NEMOURS & CO E I.
 XX Morgante M, Vogel JM;
 XX WPI; 1996-277795/28.
 XX Modified amplified fragment length polymorphism assay - for detection of
 PT polymorphism esp. in micro:satellite regions.
 XX Example 1; Page 76; 173pp; English.
 XX Detecting polymorphisms between 2 nucleic acid samples, esp. in
 CC microsatellite regions, comprises digesting the nucleic acid to generate

CC fragments, ligating adaptor segments to their ends, amplifying them using
 CC primer directed amplification and comparing the prods. to detect
 CC differences. The primers used in the amplification comprise a primer
 CC consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
 CC directed primer, comprising a sequence complementary to an adaptor
 CC segment. The present sequence is an example of a SSR primer, which is
 CC flanked at its 5'-end by degenerate nucleotides. The method represents a
 CC modified amplified fragment length polymorphism assay, which is partic.
 CC useful for genome fingerprinting, i.e. for genetic trait marking and
 CC germplasm comparisons
 XX Sequence 18 BP; 8 A; 7 C; 0 G; 0 T; 0 U; 3 Other;
 SQ Query Match 0.4%; Score 15; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1.4e+03;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2318 TGTGTGTGTGTGTGT 2332
 DB 18 TGTGTGTGTGTGTGT 4
 RESULT 1490
 AA222163/C
 ID AA222163 standard; DNA; 18 BP.
 XX AC AA222163;
 XX 26-NOV-1999 (first entry)
 XX Human c-IAP-1 mRNA inhibiting antisense oligo ISIS #23345.
 XX Cellular Inhibitor of Apoptosis-1; antisense; diagnostic; therapeutic;
 KW c-IAP-1; prophylaxis; infection; inflammation; tumor formation; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX US958772-A.
 XX 28-SEP-1999.
 XX 03-DEC-1998; 98US-00205204.
 XX 03-DEC-1998; 98US-00205204.
 XX (ISIS-) ISIS PHARM INC.
 XX Bennett CF, Cowsett LM, Ackermann EU;
 XX WPI; 1999-561047/47.
 XX Antisense compounds complementary to Cellular Inhibitor of Apoptosis-1
 PT useful for e.g. diagnostics, therapeutics, and as research reagents.
 XX Claim 3; Col 38; 32pp; English.
 XX The invention provides antisense compounds of 8-30 nucleotides that
 CC inhibit the expression of human Cellular Inhibitor of Apoptosis-1 (c-IAP-
 CC 1). The antisense compounds may be used for diagnostics, therapeutics
 CC (for modulating the expression of c-IAP-1), prophylaxis (e.g. to prevent
 CC or delay infection, inflammation, or tumor formation), as research
 CC reagents (e.g. to distinguish between members of a biological pathway)
 CC and in kits. Sequences AA222150-189 represent phosphorothioate
 CC oligonucleotides used for antisense inhibition of cellular inhibitor of
 CC apoptosis-1
 XX Sequence 18 BP; 4 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1.4e+03;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1606 CAGAAGTGCATCCAC 1620
 Db |||||
 17 CAGAAGTGCATCCAC 3

RESULT 1491
 ADM96437/C
 ID ADM96437 standard; DNA; 18 BP.
 XX AC ADM96437;
 XX DT 17-JUN-2004 (first entry)
 XX DE Human cIAP-1 DNA antisense oligonucleotide #14.
 XX KW Human; cellular inhibitor of apoptosis-1; cIAP-1; ss; cellular apoptosis;
 KW cancer; antisense oligonucleotide;
 KW phosphorothioate internucleoside linkage; 2'-O-methoxyethyl sugar moiety;
 KW 5-methylcytosine; autoimmune disorder; viral infection; cytostatic;
 KW immunosuppressive; virucide.
 XX OS Homo sapiens.
 XX US2004009599-A1.
 XX PD 15-JAN-2004.
 XX PF 18-JUN-2003; 2003US-00464158.
 XX PR 03-DEC-1998; 98US-02025204.
 XX PR 16-JUN-1999; 99WO-US013624.
 XX PR 24-SEP-2001; 2001US-00857278.
 XX PA (BENNETT) BENNETT C F.
 XX PA (ACKE) ACKERMANN E J.
 XX PI Bennett CF, Ackermann EJ;
 XX WPI; 2004-090476/09.
 XX DT
 XX DR
 XX PT Inducing cellular apoptosis by administering an antisense modulating the
 PT human Cellular Inhibitor of Apoptosis-1, useful in preventing or treating
 PT cancer, autoimmune disorders and viral infections.
 XX Example 15; SEQ ID NO 21; 25pp; English.
 XX CC The invention relates to a method of inducing cellular apoptosis
 CC comprising administering to a cell an effective amount of an antisense
 CC compound targeted to a nucleic acid molecule encoding human cellular
 CC inhibitor of apoptosis-1 (cIAP-1), so that expression of cIAP-1 is
 CC inhibited and apoptosis is induced. The cell used in the method is a
 CC cancer cell. The antisense compound is an antisense oligonucleotide that
 CC comprises at least one modification of the internucleoside linkage, sugar
 CC moiety or nucleobase, wherein the modification is a phosphorothioate
 CC internucleoside linkage, a 2'-O-methoxyethyl sugar moiety or a 5-
 CC methylcytosine nucleobase. The antisense oligonucleotide is a chimeric
 CC oligonucleotide. The methods and compositions are useful for the
 CC prevention and/or treatment of diseases or conditions associated with
 CC aberrant expression or activity of human cIAP-1, such as cancer,
 CC autoimmune disorders and viral infections. This sequence represents a
 CC human cIAP-1 DNA antisense oligonucleotide of the invention.
 XX SQ Sequence 18 BP; 4 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
 XX Query Match 0.4%; Score 15; DB 1; Length 18;
 XX Best Local Similarity 100.0%; Pred. No. 1.4e+03;
 XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1606 CAGAAGTGCATCCAC 1620
 Db |||||
 17 CAGAAGTGCATCCAC 3

RESULT 1492
 AAF60477/C
 ID AAF60477 standard; DNA; 19 BP.
 XX AC AAF60477;
 XX DT 27-APR-2001 (first entry)
 XX DE Oligonucleotide clamp #18.
 XX KW Oligonucleotide clamp; ds.
 XX OS Unidentified.
 XX PN US6180777-B1.
 XX PD 30-JAN-2001.
 XX PF 03-JAN-1997; 97US-00787321.
 XX PR 12-JAN-1996; 96US-0009918P.
 XX PA (FARB) BAYER CORP.
 XX PI Horn T;
 XX WPI; 2001-201911/20.
 XX DR
 XX PT Synthesizing branched nucleic acids useful as diagnostic and molecular
 PT probes, involves combining first units having haloalkylamino groups and
 PT second units having thiol or phosphorothioate groups.
 XX Example 7; Col 19; 20pp; English.
 XX CC The present invention relates to a method for synthesising a branched or
 CC multiply connected macromolecular structure, comprising oligonucleotide
 CC clamps (OC). The macromolecular structure is capable of specifically
 CC binding to a target molecule, and can therefore be used as probes. At
 CC least one OC comprises a target binding sequence that binds specifically
 CC and stably with the target molecule, and at least two OCs comprise a signal
 CC generation moiety capable of generating a detectable signal in the
 CC presence of the target molecule. In addition the OCs are connected to one
 CC another by thioalkylamino, or thiophosphorylalkylamino bridges. The
 CC present invention is an OC used in the present invention
 XX SQ Sequence 19 BP; 9 A; 10 C; 0 G; 0 T; 0 U; 0 Other;
 XX Query Match 0.4%; Score 15; DB 1; Length 19;
 XX Best Local Similarity 100.0%; Pred. No. 1.5e+03;
 XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2319 GGTGTGTGTGTGTG 2333
 Db |||||
 19 GGTGTGTGTGTGTG 5

RESULT 1493
 ADO23027
 ID ADO23027 standard; cDNA; 19 BP.
 XX AC ADO23027;
 XX DT 01-JUL-2004 (first entry)
 XX DE Human protein kinase, lysine deficient 4, SDO target region #14.
 XX KW Human; ss; SDO; short double stranded oligonucleotide; cleavage site;
 KW viral infection; malignant tumour; genetic disease; metabolic disease;
 KW gene chip; protein chip; microarray; gene drug; Dermogene; Lungene;
 KW Hepatogene; Leukogene; Lymphogene; Prostagene; Breastogene;
 KW Braintumogene; Skin-whitogene; short interfering RNA; siRNA; cancer;
 KW RNA interference.
 XX

OS Homo sapiens.
XX US2004072769-A1.
XX 15-APR-2004.
XX 16-SEP-2002; 2002US-00016490.
XX 16-SEP-2002; 2002US-00016490.
XX (YINJ/) YIN J Q.
XX Yin JQ;
XX WPI; 2004-355427/33.
XX Designing and selecting short double-stranded oligonucleotides for
PT treating viral infections, cancer and genetic or metabolic diseases,
PT comprises using gene chip and protein chip microarrays to identify
PT specific DNA sequences.
XX Disclosure; Page 10; 58pp; English.
XX The invention relates to screening, identifying or predicting, and
CC assembling 19-25 nt double-stranded oligonucleotides (termed short double
CC stranded oligonucleotides, SDO) as active pharmaceutical compositions
CC for the treatment of viral infections, malignant tumours, and genetic and
CC metabolic diseases, comprising screening and identifying a specific DNA
CC sequence in an abnormal gene encoding a protein with gene chip and
CC protein chip microarrays. The above method comprises screening the
CC disease-causing genes, over-expressing in cells and/or tissues, with the
CC gene chip and protein chip microarrays, identifying a specific DNA
CC sequence within the abnormal gene encoding a protein or playing other
CC biological roles with the assistance of computer and specific software,
CC predicting efficacious 19-25 nt double-stranded oligonucleotides with a
CC 5'-AU(T)CCG-3' or 5'-U(T)CCCG-3' special pattern complementary to at
CC least a portion of an RNA molecule and making sure that selected sequence
CC is not localised within the stem-loop of target mRNA with any related
CC software. Also included are pharmaceutical compositions of gene drugs
CC (such as Dermogene, Lungene, Hepatogene, Leukogene, Lymphogene,
CC Prostogene, Braastogene, Brantumogene and Skin-whitogene including but
CC being not limited to part or all of the following components: single or a
CC group of specific 19-25 nt dsRNA, 19-25 nt srna-cDNA, 19-25 nt dsRNA
CC and/or single-stranded RNA and/or DNA with the special pattern, 5'-
CC CCGAT(U)-3' or its derivatives, one or more nucleic acid condensation
CC agents (or none), one or more pharmaceutical carriers, one or more
CC specific cell-targeting proteins and other active agents and additional
CC materials) and a simplified method for predicting and selecting a
CC specific and efficacious small double-stranded oligonucleotides (SDSO),
CC antisense oligonucleotide molecules or short interfering RNA (siRNA)
CC (comprising identifying a special pattern that can be localised in any
CC position of an oligonucleotide sequence evaluating the specificity of a
CC selected sequence). The Short interfering RNA (siRNA) are targeted
CC against genes involved in viral infection, malignant tumours, genetic and
CC metabolic diseases. The methods are useful for designing and selecting
CC short double-stranded oligonucleotides as a gene drug that can
SQ Sequence 19 BP; 1 A; 11 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.5e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2589 GCTCGGCCCTCCCA 2603
DB 5 GCTCGGCCCTCCCA 19

CC specifically inactivate a group of corresponding genes. The composition
CC may be used for treating diseases or disorders associated with abnormal
CC expression of genes in cells or tissues of humans or animals, such as
CC viral infections, cancer, or genetic or metabolic diseases. The present
CC sequence is a target region for an SDO from an (unspecified) human gene.
XX
SQ Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.5e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2990 TTCTGGCACCGCAG 3004

Db 19 TTCTGGCACCGCAG 5

RESULT 1495

ABN99700

ID ABN99700 standard; DNA; 20 BP.

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CC specifically inactivate a group of corresponding genes. The composition
CC may be used for treating diseases or disorders associated with abnormal
CC expression of genes in cells or tissues of humans or animals, such as
CC viral infections, cancer, or genetic or metabolic diseases. The present
CC sequence is a target region for an SDO from an (unspecified) human gene.
XX
SQ Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.5e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2990 TTCTGGCACCGCAG 3004

Db 19 TTCTGGCACCGCAG 5

RESULT 1495

ABN99700

ID ABN99700 standard; DNA; 20 BP.

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CC specifically inactivate a group of corresponding genes. The composition
CC may be used for treating diseases or disorders associated with abnormal
CC expression of genes in cells or tissues of humans or animals, such as
CC viral infections, cancer, or genetic or metabolic diseases. The present
CC sequence is a target region for an SDO from an (unspecified) human gene.
XX
SQ Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.5e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2990 TTCTGGCACCGCAG 3004

Db 19 TTCTGGCACCGCAG 5

RESULT 1495

ABN99700

ID ABN99700 standard; DNA; 20 BP.

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CC specifically inactivate a group of corresponding genes. The composition
CC may be used for treating diseases or disorders associated with abnormal
CC expression of genes in cells or tissues of humans or animals, such as
CC viral infections, cancer, or genetic or metabolic diseases. The present
CC sequence is a target region for an SDO from an (unspecified) human gene.
XX
SQ Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.5e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2990 TTCTGGCACCGCAG 3004

Db 19 TTCTGGCACCGCAG 5

RESULT 1495

ABN99700

ID ABN99700 standard; DNA; 20 BP.

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CC specifically inactivate a group of corresponding genes. The composition
CC may be used for treating diseases or disorders associated with abnormal
CC expression of genes in cells or tissues of humans or animals, such as
CC viral infections, cancer, or genetic or metabolic diseases. The present
CC sequence is a target region for an SDO from an (unspecified) human gene.
XX
SQ Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.5e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2990 TTCTGGCACCGCAG 3004

Db 19 TTCTGGCACCGCAG 5

RESULT 1495

ABN99700

ID ABN99700 standard; DNA; 20 BP.

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CC specifically inactivate a group of corresponding genes. The composition
CC may be used for treating diseases or disorders associated with abnormal
CC expression of genes in cells or tissues of humans or animals, such as
CC viral infections, cancer, or genetic or metabolic diseases. The present
CC sequence is a target region for an SDO from an (unspecified) human gene.
XX
SQ Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.5e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2990 TTCTGGCACCGCAG 3004

Db 19 TTCTGGCACCGCAG 5

RESULT 1495

ABN99700

ID ABN99700 standard; DNA; 20 BP.

XX AC

XX AC

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KW Human; Kaposi's sarcoma; tumour; angiogenesis; tag; ss.
XX Homo sapiens.
XX EP125233-A2.
XX 24-JUL-2002.
XX 23-JAN-2002; 2002EP-00075264.
XX 23-JAN-2001; 2001EP-00200228.
PR 28-SEP-2001; 2001EP-00203703.
PR 28-SEP-2001; 2001US-0325722P.
XX (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
XX Van Der Kuyl AC, Cornelissen M;
XX WPI; 2002-668396/72.
XX Determining presence of a tumor cell or angiogenesis, and the
PT effectiveness of treatment, by detecting the presence of marker genes is
PT useful to detect and monitor treatment of Kaposi's Sarcoma.
XX Example 9; Page 13; 38pp; English.
XX The present invention describes a method for determining if an individual
CC has a tumour cell or site of angiogenesis, or if a treatment is effective
CC in changing angiogenesis or changing a status of a set of target cells,
CC comprising determining if a sample of the subject has an expression
CC product of at least one marker gene. Also described is a compound capable
CC of altering the expression or activity of Keratin 14, TIE 1, Salicoadhesin
CC or Siglec in a cell. Peripheral blood mononuclear cell (PBMC)-expressed
CC Keratin 14, TIE 1, Salicoadhesin or Siglec, and kits containing them from
CC the present invention can be used in a diagnostic method, particularly as
CC an indicator of angiogenesis or to determine presence of a tumour cell.
CC The method of the invention is suitable to determine within a few days if
CC a certain treatment against Kaposi's Sarcoma is successful. ABQ81851 to
CC ABQ82006 represent nucleotide sequence used in the exemplification of the
CC present invention
XX Sequence 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3704 CATGTGGCCAGG 3718
DB 6 CATGTGGCCAGG 20
RESULT 1498
AAL42402
ID AAL42402 standard; DNA; 20 BP.
XX
XX AAL42402;
XX
XX 28-JUN-2002 (first entry)
XX
XX HPV 16-18 E6/E7 gene segment screening method-related PCR primer P3.
DE PCR; primer; ss; gene screening method; cervical cancer; P3;
XX human papilloma virus 16.18; E6/E7 gene segment; HPV 16.18.
XX Unidentified.
XX CN1322844-A.
XX
XX 21-NOV-2001.
XX
XX 16-FEB-2001; 2001CN-00101870.
XX
PR 16-FEB-2001; 2001CN-00101870.
XX (BEIJ-) BEIJING BOTAI DI BIOLOGICAL ENG SCI & TEC.
XX Wang B, Yan Z, Qian D;
XX WPI; 2002-148635/20.
XX Gene screening method for high risk group of cervical cancer.
XX Claim 4; Page 4 (Disclosure); 7pp; Chinese.
XX The invention comprises a gene screening method for groups with a high
CC risk of developing cervical cancer. The gene screening method involves
CC determining whether or not epithelial tissue cells have the integral
CC human papilloma virus (HPV) 16.18 E6/E7 gene segment. The method of the
CC invention may be used to screen high risk groups for cervical cancer. The
CC present sequence represents a PCR primer used in the method of the
CC invention
XX Sequence 20 BP; 3 A; 6 C; 7 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2990 TTCTGGCACCAGCAG 3004
DB 3 TTCTGGCACCAGCAG 17
RESULT 1499
ABL94407
ID ABL94407 standard; DNA; 20 BP.
XX
XX ABL94407;
XX
XX 29-JUL-2002 (first entry)
XX
XX Mouse C/EBP beta phosphorothioate antisense oligonucleotide, SEQ ID:173.
DE
XX Mouse; murine; C/EBP beta; CCAAT/enhancer-binding protein beta; C/EBP2;
KW LAP; TCF5; CRP2; NFIL6; IL6DBP; NF-M; AGP/EBF; Apc/EBP;
KW transcription factor; tissue development; cellular function;
KW proliferation; differentiation; hormone responsiveness;
KW oxidative stress response; IL-6 signalling mediator; interleukin-6;
KW carbohydrate metabolism; immunity; Th1 response; female fertility;
KW gluconeogenesis; ovarian; cancer; tumour formation; type II; diabetes;
KW infection; inflammation; expression inhibition; phosphorothioate;
KW antisense oligonucleotide; ss.
XX
XX Mus musculus.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate linkages"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
FT cytosines are 5-methylcytosine"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
FT cytosines are 5-methylcytosine"
XX
XX US6271030-B1.
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XX 07-AUG-2001.
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PF 14-JUN-2000; 2000US-00593711.
 XX PR 14-JUN-2000; 2000US-00593711.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI Monia BP, Butler MM, Wyatt J;
 XX DR WPI; 2002-214451/27.
 XX PT Novel antisense compound targeted to nucleic acids encoding human or
 PT mouse CCAAT/enhancer binding protein (C/EBP) beta, useful in vitro for
 PT inhibiting expression of human or mouse C/EBP beta in cells/tissues.
 XX PS Example 17; Col 51-52; 69pp; English.
 XX CC Sequences ABL94252-ABL94476 represent antisense oligonucleotides targeted
 CC to the human or mouse CCAAT/enhancer-binding protein alpha (C/EBP alpha)
 CC gene, which inhibit its expression. The antisense oligonucleotides were
 CC designed to target different regions of the human and/or mouse C/EBP
 CC alpha RNA, and were analysed for their effect on C/EBP alpha mRNA levels
 CC by quantitative real-time PCR. The C/EBP family of proteins are a family
 CC of transcription factors which regulate the expression of a wide range of
 CC genes that control normal tissue development, cellular function, cellular
 CC proliferation and functional differentiation. C/EBP beta (also known as
 CC C/EBP2, LAP, TCF3, CRP2, NFIL6, IL6BP, NF-M, AGP/EBP and Apc/EBP)
 CC primarily regulates hormone responsiveness and oxidative stress responses
 CC and is a mediator of IL-6 (interleukin-6) signalling. C/EBP beta is
 CC thought to be involved in carbohydrate metabolism, immunity, the Th1
 CC response, female fertility and gluconeogenic pathways. C/EBP beta is
 CC expressed in the liver, lung, spleen, kidney, brain, and testis, with the
 CC highest expression found in the lung. It is also expressed at a higher
 CC level in malignant ovarian tissue compared with normal ovarian tissue,
 CC and its expression in pancreas is upregulated in response to chronically
 CC elevated levels of glucose, indicating that it is involved in the
 CC impairment of insulin secretion in type II diabetes. The oligonucleotides
 CC of the invention are useful for diagnosis, prevention and treatment of
 CC conditions associated with C/EBP beta expression, such as cancer
 CC (particularly ovarian cancer), tumour formation, diabetes (particularly
 CC type II diabetes), infection, or inflammation
 XX SQ Sequence 20 BP; 2 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2639 TCCAGCACCTTGTC 2653
 DB 2 TCCAGCACCTTGTC 16
 RESULT 1500
 ADG13379
 ID ADC13379 standard; DNA; 20 BP.
 XX AC ADC13379;
 XX AC ADC13379;
 XX DT 18-DEC-2003 (first entry)
 XX DE Kaposi's sarcoma tag confirmation primer, SEQ ID No 46.
 XX KW marker gene; tumour; Kaposi's Sarcoma; peripheral blood mononuclear cell;
 KW PBMC; expressed keratin 14; TIE 1; Salivohesin; Siglec 1; angiogenesis;
 KW drug target; tag; SAGE library; KS3; KS4; RT-PCR; primer; ss.
 XX OS Unidentified.
 XX XX EP1298221-A1.
 XX PN 02-APR-2003.
 XX PD 28-SEP-2001; 2001EP-00203703.
 XX PF

XX 28-SEP-2001; 2001EP-00203703.
 XX PR (PRIM-) PRIMAGEN HOLDING BV.
 XX PA Van Der Kuyl AC, Cornelissen M;
 XX PI WPI; 2003-589342/56.
 XX DR
 XX PT Determining whether a treatment is effective in changing a status of a
 PT certain set of target cells in an individual comprises determining
 PT whether the sample comprises an expression product of at least one marker
 PT gene.
 XX PS Disclosure; SEQ ID NO 46; 94pp; English.
 XX CC The invention relates to a novel method for determining whether a
 CC treatment is effective in changing a status of a certain set of target
 CC cells in an individual. The method comprises obtaining a sample from an
 CC individual after initiation of the treatment; and determining whether the
 CC sample comprises an expression product of at least one marker gene. The
 CC marker gene and a proteinaceous molecule (which can bind to the protein
 CC derived from the marker gene of the invention) are useful for determining
 CC whether a treatment is effective in counteracting a tumour in an
 CC individual, especially Kaposi's Sarcoma. Peripheral blood mononuclear
 CC cell (PBMC) expressed keratin 14, TIE 1, Salivohesin, or Siglec 1
 CC sequences or a fully defined sequence given in the specification, or
 CC their analogues are useful as indicators for angiogenesis and for
 CC detecting the presence of a tumour cell in an individual. The expression
 CC product of a gene comprising a marker gene of the invention is useful as
 CC a drug target. The compound is useful for preparing a medicament. This
 CC polynucleotide sequence represents a confirmation primer of a tag
 CC sequence of Kaposi's Sarcoma of the invention.
 XX SQ Sequence 20 BP; 3 A; 3 C; 7 G; 2 T; 0 U; 5 Other;
 Query Match 0.4%; Score 15; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 3704 CATGTGGCCAGG 3718
 DB 6 CATGTGGCCAGG 20
 RESULT 1501
 ABZ90612/c
 ID ABZ90612 standard; DNA; 20 BP.
 XX AC ABZ90612;
 XX DT 17-OCT-2003 (first entry)
 XX DE Human oligonucleotide sequence.
 XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubinone; antiinflammatory; antiallergic;
 KW antisthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX OS Homo sapiens.
 XX XX WO200285308-A2.
 XX PN 31-OCT-2002.
 XX PD 23-APR-2002; 2002WO-US013135.
 XX PF 24-APR-2001; 2001US-0286137P.
 XX PR (EPIG-) EPIGENESIS PHARM INC.
 XX PA


```

OS Homo sapiens.
XX
XX Key
XX modified_base
XX Location/Qualifiers
XX 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "OTHER= phosphorothioate backbone. All cytidine
XX residues are 5-methylcytidines"
XX modified_base
XX 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX modified_base
XX 16..20
XX /*tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
XX WO2004021978-A2.
XX
XX 18-MAR-2004.
XX
XX 19-AUG-2003; 2003WO-US025833.
XX
XX 19-AUG-2002; 2002US-0404495P.
XX (PHAA ) PHARMACIA CORP.
XX
XX Weinstein EJ, Griggs DW;
XX WPI; 2004-248358/23.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
XX composition for treating e.g., diabetes, cancer or cardiovascular
XX disorder.
XX
XX Claim 3; SEQ ID NO 1533; 555pp; English.
XX
XX The invention describes a new antisense compound, having a sequence
XX comprising 8-30 bp targeted to a nucleic acid encoding endothelial
XX specific molecule-1 (ESM-1), that specifically hybridises with the
XX nucleic acid ESM-1 and inhibits its expression. Also described are: a
XX composition; inhibiting the expression of ESM-1 in cells or tissues; and
XX treating an animal having a disease or condition associated with ESM-1.
XX The compound is useful for preparing a composition for treating diabetes,
XX cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
XX cardiovascular or neurological disorder. This sequence represents an
XX antisense oligonucleotide that can be used to modulate expression of
XX endothelial specific molecule-1 (ESM-1).
XX
XX Sequence 20 BP; 7 A; 2 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1.6e+03;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3035 TAAAGCTATTATGG 3049
XX
XX Db 5 TAAAGCTATTATGG 19
XX
XX RESULT 1504
XX ADL59368
XX ID ADL59368 standard; DNA; 20 BP.
XX
XX AC ADL59368;
XX
XX DT 03-JUN-2004 (first entry)
XX
XX DE Human ESM-1 antisense oligonucleotide seqid 1617.
XX
XX KW cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
XX gene therapy; endothelial specific molecule-1; ESM-1;

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```

KW ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KW angiogenic disorder; immunological disorder; cardiovascular disorder;
KW neurological disorder; antisense technology; ss.
XX
XX OS Homo sapiens.
XX
XX PH Key
XX modified_base
XX Location/Qualifiers
XX 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "OTHER= phosphorothioate backbone. All cytidine
XX residues are 5-methylcytidines"
XX modified_base
XX 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX modified_base
XX 16..20
XX /*tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
XX PN WO2004021978-A2.
XX
XX 18-MAR-2004.
XX
XX 19-AUG-2003; 2003WO-US025833.
XX
XX 19-AUG-2002; 2002US-0404495P.
XX (PHAA ) PHARMACIA CORP.
XX
XX Weinstein EJ, Griggs DW;
XX WPI; 2004-248358/23.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
XX composition for treating e.g., diabetes, cancer or cardiovascular
XX disorder.
XX
XX Claim 3; SEQ ID NO 1617; 555pp; English.
XX
XX The invention describes a new antisense compound, having a sequence
XX comprising 8-30 bp targeted to a nucleic acid encoding endothelial
XX specific molecule-1 (ESM-1), that specifically hybridises with the
XX nucleic acid ESM-1 and inhibits its expression. Also described are: a
XX composition; inhibiting the expression of ESM-1 in cells or tissues; and
XX treating an animal having a disease or condition associated with ESM-1.
XX The compound is useful for preparing a composition for treating diabetes,
XX cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
XX cardiovascular or neurological disorder. This sequence represents an
XX antisense oligonucleotide that can be used to modulate expression of
XX endothelial specific molecule-1 (ESM-1).
XX
XX Sequence 20 BP; 6 A; 2 C; 4 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1.6e+03;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3035 TAAAGCTATTATGG 3049
XX
XX Db 6 TAAAGCTATTATGG 20
XX
XX RESULT 1505
XX ADL59461
XX ID ADL59461 standard; DNA; 20 BP.
XX
XX AC ADL59461;
XX
XX DT 03-JUN-2004 (first entry)
XX
XX

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DE Human ESM-1 antisense oligonucleotide seqid 1710.
XX cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
XX gene therapy; endothelial specific molecule-1; ESM-1;
KW ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KW angiogenic disorder; immunological disorder; cardiovascular disorder;
KW neurological disorder; antisense technology; ss.
XX Homo sapiens.
OS
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone. All cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX WO2004021978-A2.
XX 18-MAR-2004.
XX 19-AUG-2003; 2003WO-US025833.
XX 19-AUG-2002; 2002US-0404495P.
XX (PHAA ) PHARMACIA CORP.
XX Weinstein EJ, Griggs DW;
XX WPI; 2004-248358/23.
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
XX composition for treating e.g., diabetes, cancer or cardiovascular
XX disorder.
XX Claim 3; SEQ ID NO 1710; 555pp; English.
XX The invention describes a new antisense compound, having a sequence
XX comprising 8-30 bp targeted to a nucleic acid encoding endothelial
XX specific molecule-1 (ESM-1), that specifically hybridises with the
XX nucleic acid ESM-1 and inhibits its expression. Also described are: a
XX nucleic acid ESM-1 and inhibits its expression. Also described are: a
XX composition; inhibiting the expression of ESM-1 in cells or tissues; and
XX treating an animal having a disease or condition associated with ESM-1.
XX The compound is useful for preparing a composition for treating diabetes,
XX cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
XX cardiovascular or neurological disorder. This sequence represents an
XX antisense oligonucleotide that can be used to modulate expression of
XX endothelial specific molecule-1 (ESM-1).
XX Sequence 20 BP; 7 A; 1 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3035 TAAAGCTATTATGG 3049
Db 1 TAAAGCTATTATGG 15
RESULT 1506
ID ADL59304
ID ADL59304 standard; DNA; 20 BP.
XX
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```
AC ADL59304;
XX 03-JUN-2004 (first entry)
XX Human ESM-1 antisense oligonucleotide seqid 1553.
XX cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KW gene therapy; endothelial specific molecule-1; ESM-1;
KW ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KW angiogenic disorder; immunological disorder; cardiovascular disorder;
KW neurological disorder; antisense technology; ss.
XX Homo sapiens.
OS
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone. All cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX WO2004021978-A2.
XX 18-MAR-2004.
XX 19-AUG-2003; 2003WO-US025833.
XX 19-AUG-2002; 2002US-0404495P.
XX (PHAA ) PHARMACIA CORP.
XX Weinstein EJ, Griggs DW;
XX WPI; 2004-248358/23.
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
XX composition for treating e.g., diabetes, cancer or cardiovascular
XX disorder.
XX Claim 3; SEQ ID NO 1553; 555pp; English.
XX The invention describes a new antisense compound, having a sequence
XX comprising 8-30 bp targeted to a nucleic acid encoding endothelial
XX specific molecule-1 (ESM-1), that specifically hybridises with the
XX nucleic acid ESM-1 and inhibits its expression. Also described are: a
XX nucleic acid ESM-1 and inhibits its expression. Also described are: a
XX composition; inhibiting the expression of ESM-1 in cells or tissues; and
XX treating an animal having a disease or condition associated with ESM-1.
XX The compound is useful for preparing a composition for treating diabetes,
XX cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
XX cardiovascular or neurological disorder. This sequence represents an
XX antisense oligonucleotide that can be used to modulate expression of
XX endothelial specific molecule-1 (ESM-1).
XX Sequence 20 BP; 7 A; 2 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3035 TAAAGCTATTATGG 3049
Db 4 TAAAGCTATTATGG 18
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RESULT 1507
ADL59367
ID ADL59367 standard; DNA; 20 BP.
XX
AC ADL59367;
XX
DT 03-JUN-2004 (first entry)
XX
DE Human ESM-1 antisense oligonucleotide seqid 1616.
XX
KW cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KW gene therapy; endothelial specific molecule-1; ESM-1;
KW ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KW angiogenic disorder; immunological disorder; cardiovascular disorder;
KW neurological disorder; antisense technology; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone. All cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN WO2004021978-A2.
XX
PD 18-MAR-2004.
XX
PF 19-AUG-2003; 2003WO-US025833.
XX
PR 19-AUG-2002; 2002US-0404495P.
XX
PA (PHAA ) PHARMACIA CORP.
XX
PI Weinstein EJ, Griggs DW;
XX
DR WPI; 2004-248358/23.
XX
PS New antisense compound, having a sequence targeted to a nucleic acid
PS encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
PS composition for treating e.g., diabetes, cancer or cardiovascular
PS disorder.
XX
CC Claim 3; SEQ ID NO 1616; 555pp; English.
XX
CC The invention describes a new antisense compound, having a sequence
CC comprising 8-30 bp targeted to a nucleic acid encoding endothelial
CC specific molecule-1 (ESM-1), that specifically hybridises with the
CC nucleic acid ESM-1 and inhibits its expression. Also described are: a
CC composition; inhibiting the expression of ESM-1 in cells or tissues; and
CC treating an animal having a disease or condition associated with ESM-1.
CC The compound is useful for preparing a composition for treating diabetes,
CC cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
CC cardiovascular or neurological disorder. This sequence represents an
CC antisense oligonucleotide that can be used to modulate expression of
CC endothelial specific molecule-1 (ESM-1).
XX
SQ Sequence 20 BP; 7 A; 1 C; 4 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. NO. 1.6e+03;
Matches. 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3035 TAAAGCTATTATGG 3049
```

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|||||
2 TAAAGCTATTATGG 16

RESULT 1508
ADL59269
ID ADL59269 standard; DNA; 20 BP.
XX
AC ADL59269;
XX
DT 03-JUN-2004 (first entry)
XX
DE Human ESM-1 antisense oligonucleotide seqid 1518.
XX
KW cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KW gene therapy; endothelial specific molecule-1; ESM-1;
KW ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KW angiogenic disorder; immunological disorder; cardiovascular disorder;
KW neurological disorder; antisense technology; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone. All cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN WO2004021978-A2.
XX
PD 18-MAR-2004.
XX
PF 19-AUG-2003; 2003WO-US025833.
XX
PR 19-AUG-2002; 2002US-0404495P.
XX
PA (PHAA ) PHARMACIA CORP.
XX
PI Weinstein EJ, Griggs DW;
XX
DR WPI; 2004-248358/23.
XX
PS New antisense compound, having a sequence targeted to a nucleic acid
PS encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
PS composition for treating e.g., diabetes, cancer or cardiovascular
PS disorder.
XX
CC Claim 3; SEQ ID NO 1518; 555pp; English.
XX
CC The invention describes a new antisense compound, having a sequence
CC comprising 8-30 bp targeted to a nucleic acid encoding endothelial
CC specific molecule-1 (ESM-1), that specifically hybridises with the
CC nucleic acid ESM-1 and inhibits its expression. Also described are: a
CC composition; inhibiting the expression of ESM-1 in cells or tissues; and
CC treating an animal having a disease or condition associated with ESM-1.
CC The compound is useful for preparing a composition for treating diabetes,
CC cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
CC cardiovascular or neurological disorder. This sequence represents an
CC antisense oligonucleotide that can be used to modulate expression of
CC endothelial specific molecule-1 (ESM-1).
XX
SQ Sequence 20 BP; 7 A; 1 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 15; DB 1; Length 20;
```

Best Local Similarity 100.0%; Pred. No. 1.6e+03; Mismatches 0; Indels 0; Gaps 0;

QY 3035 TAAAGCTATTATGG 3049
 Db 3 TAAAGCTATTATGG 17

RESULT 1509
 ADM15304/c
 ID ADM15304 standard; DNA; 20 BP.
 XX AC ADM15304;
 XX DT 01-JUL-2004 (first entry)
 XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1491.
 XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX OS Homo sapiens.
 XX OS Synthetic.
 XX FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methoxyethyls"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX WO2004028458-A2.
 XX PD 08-APR-2004.
 XX PF 25-SEP-2003; 2003WO-US030374.
 XX PR 25-SEP-2002; 2002US-0413549P.
 XX (PHAA) PHARMACIA CORP.
 XX Gierse JK;
 XX WPI; 2004-305094/28.
 XX New antisense compound, having a sequence targeted to a nucleic acid
 encoding mPGES-1, useful for preparing a composition for treating e.g.,
 inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 ischemia.
 XX Claim 4; SEQ ID NO 1491; 132pp; English.
 XX The present sequence represents a chimeric antisense oligonucleotide
 targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 human mPGES-1 gene is located on chromosome 9, more specifically to
 9q34.3. The present invention also describes: (1) antisense compounds,
 having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and

CC inhibits its expression; (2) a method of inhibiting the expression of
 mPGES-1 in cells or tissues; and (3) a method of treating an animal
 having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 antisense oligonucleotides and antisense compounds have cytostatic,
 antidiabetic, immunomodulator, cardiant, neuroprotective,
 antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 ophthalmological, immunomodulatory and cardiovascular activities, and can
 be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 can be used for preparing a composition for treating a disease or
 condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 ophthalmic, immunological, cardiovascular or neurological disorder.
 XX Sequence 20 BP; 12 A; 7 C; 1 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2318 TGTGTGTGTGTGTGT 2332
 Db 20 TGTGTGTGTGTGTGT 6

RESULT 1510
 ADO21199
 ID ADO21199 standard; DNA; 20 BP.
 XX AC ADO21199;
 XX DT 15-JUL-2004 (first entry)
 XX DE NOD2/CARD15 sequencing primer #9.
 XX KW Crohn's disease; NOD2/CARD15 locus; single nucleotide polymorphism; SNP;
 KW autoimmune disease; peoriasis; ulcerative colitis; myasthenia gravis;
 KW autoimmune gastritis; Type I diabetes; ss; primer.
 XX OS Homo sapiens.
 XX US2004076960-A1.
 XX PD 22-APR-2004.
 XX PF 18-OCT-2002; 2002US-00274300.
 XX PR 18-OCT-2002; 2002US-00274300.
 XX (TAYL/) TAYLOR K D.
 XX (ROTT/) ROTTER J I.
 XX (YANG/) YANG H.
 XX (SUGI/) SUGIMURA K.
 XX (TARG/) TARGAN S R.
 XX Taylor KD, Rotter JI, Yang H, Sugimura K, Targan SR;
 WPI; 2004-339995/31.
 XX Diagnosing or predicting susceptibility to Crohn's disease in individual,
 comprising determining presence or absence of disease-predisposing
 PT haplotype comprising Jw1 variant allele and/or 268S allele at NOD2/CARD15
 PT locus.
 XX Example 3; Page 15; 35pp; English.
 XX The invention relates to a method of diagnosing or predicting
 CC susceptibility to Crohn's disease, comprising determining the presence or
 CC absence of a disease-predisposing haplotype of a Jw1 variant allele
 CC and/or 268S allele at the NOD2/CARD15 locus, in an individual. The
 CC disease-predisposing haplotype further comprises a variant allele or an
 CC allele chosen from Jw15, Jw16, Jw17 and Jw18 variant allele. The disease-
 CC predisposing haplotype further comprises an allele at a single nucleotide
 CC polymorphism (SNP) chosen from SNP8, SNP12, and SNP13. The method is

CC useful for diagnosing or predicting susceptibility to a variety of
CC autoimmune diseases such as Crohn's disease, psoriasis, ulcerative
CC colitis, myasthenia gravis, autoimmune gastritis and Type I diabetes. The
CC present sequence represents a primer used to sequence the nucleotide
CC sequence of NOD2/CARD15.

XX
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1874 TGGAGGAGCTCTTCA 1888
Db 2 TGGAGGAGCTCTTCA 16
|||||

RESULT 1511

ADO81056
ID ADO81056 standard; DNA; 25 BP.

XX ADO81056;

XX 29-JUL-2004 (first entry)

XX Cow prion protein microsatellite locus primer #68.

XX gene typing; polymorphic microsatellite loci; PML;
KW disease predisposition; microsatellite marker; prion disease;
KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
KW milk protein; hormone; transcription factor; pT7-blue-vector; cow;
KW microsatellite; PCR; primer; ss.

XX Bos taurus.

XX DE10236711-A1.

XX 26-FEB-2004.

XX 09-AUG-2002; 2002DE-01036711.

XX 09-AUG-2002; 2002DE-01036711.

XX (UYHO-) UNIV HOHENHEIM.

XX Geldermann H, Preuss S, Han Y;

XX WPI; 2004-215730/21.

XX
PT Typing genes that contain polymorphic microsatellite loci, useful for
PT identifying predisposition to disease, by amplification and determining
PT length of amplicons.

PS Example 3; Page 28; 64pp; German.

XX The invention describes a method of typing (M1) a gene (I) that has one
CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
CC amplification of at least one DNA region of (I) that includes PML, using
CC as template a DNA sample containing at least one segment of (I); and
CC determining the length of the resulting amplicon(s). Also described are:
CC a method of determining (M2) microsatellite markers (NM) for
CC predisposition to a disease, associated with a gene that includes one or
CC more PML; and prediagnosis (M3) of diseases associated with gene that
CC include PML. The method is used to identify microsatellite markers, in a
CC disease-related gene, that are associated with a predisposition to
CC diseases and for prediagnosis of such diseases, especially prion diseases
CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
CC metabolic diseases; also to type genes that encode milk proteins,
CC hormones or transcription factors. The method is simpler, quicker and
CC particularly less expensive than known methods based on sequencing. This
CC sequence represents a primer used to genotype a region of the cow prion
CC protein (PrP) comprising a polymorphic microsatellite locus.

XX

SQ Sequence 25 BP; 0 A; 2 C; 0 G; 23 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 25;
Best Local Similarity 78.3%; Pred. No. 2e+03;
Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 3262 TATTTTATTTGCTTTCTCTTT 3284
Db 3 TTTTCTTTTCTTTCTCTTT 25
|||||

RESULT 1512

ADO81061
ID ADO81061 standard; DNA; 25 BP.

XX ADO81061;

XX 29-JUL-2004 (first entry)

XX Cow prion protein microsatellite locus primer #73.

XX gene typing; polymorphic microsatellite loci; PML;
KW disease predisposition; microsatellite marker; prion disease;
KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
KW milk protein; hormone; transcription factor; pT7-blue-vector; cow;
KW microsatellite; PCR; primer; ss.

XX Bos taurus.

XX DE10236711-A1.

XX 26-FEB-2004.

XX 09-AUG-2002; 2002DE-01036711.

XX 09-AUG-2002; 2002DE-01036711.

XX (UYHO-) UNIV HOHENHEIM.

XX Geldermann H, Preuss S, Han Y;

XX WPI; 2004-215730/21.

XX
PT Typing genes that contain polymorphic microsatellite loci, useful for
PT identifying predisposition to disease, by amplification and determining
PT length of amplicons.

PS Example 3; Page 28; 64pp; German.

XX The invention describes a method of typing (M1) a gene (I) that has one
CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
CC amplification of at least one DNA region of (I) that includes PML, using
CC as template a DNA sample containing at least one segment of (I); and
CC determining the length of the resulting amplicon(s). Also described are:
CC a method of determining (M2) microsatellite markers (NM) for
CC predisposition to a disease, associated with a gene that includes one or
CC more PML; and prediagnosis (M3) of diseases associated with gene that
CC include PML. The method is used to identify microsatellite markers, in a
CC disease-related gene, that are associated with a predisposition to
CC diseases and for prediagnosis of such diseases, especially prion diseases
CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
CC metabolic diseases; also to type genes that encode milk proteins,
CC hormones or transcription factors. The method is simpler, quicker and
CC particularly less expensive than known methods based on sequencing. This
CC sequence represents a primer used to genotype a region of the cow prion
CC protein (PrP) comprising a polymorphic microsatellite locus.

XX Sequence 25 BP; 0 A; 2 C; 0 G; 23 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 25;
Best Local Similarity 78.3%; Pred. No. 2e+03;
Matches 18; Conservative 0; Mismatches 5; Indels 0; Gaps 0;


```

RESULT 1515
AAX70271
ID AAX70271 standard; RNA; 18 BP.
XX
XX
AC AAX70271;
XX
XX 28-JUL-1999 (first entry)
XX
XX Human flt1 VEGF receptor hairpin ribozyme substrate #39.
XX
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
XX Homo sapiens.
OS
XX
XX WO9715662-A2.
FN
XX
XX 01-MAY-1997.
PD
XX
XX 25-OCT-1996; 96WO-US017480.
PF
XX
XX 26-OCT-1995; 95US-0005974P.
PR
XX 11-JAN-1996; 96US-00584040.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (CHIR ) CHIRON CORP.
PA
XX Pavco P, Meswigen J, Stinchcomb D, Escobedo J;
XX
XX WPI; 1997-259017/23.
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 93; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX
SQ Sequence 18 BP; 3 A; 5 C; 5 G; 0 T; 5 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 18;
Best Local Similarity 66.7%; Pred. No. 1.5e+03;
Matches 12; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
QY 1391 TCAACCTGCTGGCGCCT 1408
DB 1 UUAACCUUGUGGAGGCU 18
RESULT 1516
AAV02562
ID AAV02562 standard; DNA; 18 BP.
XX
XX
AC AAV02562;
XX
XX 04-AUG-1998 (first entry)
XX
XX Transforming growth factor beta-1 antisense oligonucleotide N37.
DE
XX Transforming growth factor beta-1; TGF beta-1; antisense oligonucleotide;
KW modulate; gene expression; ss.
XX
KW Activating sequence; Gal4; transcriptional activator; RNA polymerase;
KW Protein-protein interaction; gene therapy; therapeutic; holoenzyme;
KW Gal11; DNA binding domain; ss.
XX
XX Synthetic.
OS
XX WO9744447-A2.
FN
XX 27-NOV-1997.
PD
XX
XX 02-MAY-1997; 97WO-US007338.
PF
XX
XX 03-MAY-1996; 96US-0017016P.
PR
XX 01-MAY-1997; 97US-00017016.
PR
XX (HARD ) HARVARD COLLEGE.
PA
XX
XX Ptashne M, Lu X, Wu Y;
PI
XX
XX WPI; 1998-018502/02.
FN
XX P-PSDB; AAW31464.
XX
XX New transcriptional activator containing DNA binding domain bound to
PT peptide - useful for controlling gene expression, especially in gene
PT therapy, and in protein-protein interaction assays, does not inhibit
PT other transcription activators.
XX
XX Example 1; Page 26; 55pp; English.
XX
XX AAV02501-V02522, AAV02524-V02584, AAV02586-V02592 and AAV02594-V02616 are
CC DNA fragments used in an assay to determine novel transcriptional
CC activators. The method involves the production of transcriptional
CC activators comprising of a DNA-binding group and a 6-25 amino acid
CC peptide that is covalently bonded to the DNA binding group and does not
CC represent a fragment of a natural transcription activator. Protein-
CC protein interactions are identified in the assay by fusing a DNA-binding
CC domain to a library of DNA fragments and introducing this and a fusion of
CC target protein and a polypeptide containing a region of Gal4 which
CC interacts with Gal1p into a cell containing Gal1p and identifying
CC members of the library that interact with the target from activation of
CC transcription. Such constructs are used to activate transcription in a
CC cell, e.g. for controlling gene activity, particularly in gene therapy
CC (e.g. recognizing a site close to a selected therapeutic gene).
CC Transcription can be activated without blocking other transcriptional
CC activators. They probably act by interacting with a component of the RNA
CC polymerase II holoenzyme, Gal11, the strongest known yeast activator,
CC which provides a more sensitive assay allowing detection of even weak
CC protein-protein interactions. Such activators do not create toxicity
CC problems even when overexpressed
XX
XX
SQ Sequence 18 BP; 2 A; 12 C; 1 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 1.5e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2698 CTTCCACCCCTGCGCCTC 2715
DB 1 CTCGCCACCATGCCCTC 18
RESULT 1517
AAV48449
ID AAV48449 standard; DNA; 18 BP.
XX
XX
AC AAV48449;
XX
XX 15-OCT-1998 (first entry)
XX
XX Transforming growth factor beta-1 antisense oligonucleotide N37.
DE
XX Transforming growth factor beta-1; TGF beta-1; antisense oligonucleotide;
KW modulate; gene expression; ss.
XX

```


including bovine, porcine, feline, and rabbit interferons, useful for treating viral, malignant, and immunosuppressed or immunodeficient conditions.

XX Disclosure; Col 21; 42pp; English.

XX The invention describes a purified and isolated nucleic acid (I) encoding a non-human mammalian interferon (IFN) chosen from bovine leukocyte IFNs, bovine IFN-beta 1, 2 or 3, porcine IFN-alpha, IFN-beta, IFN-gamma, feline IFN-beta or rabbit IFN-gamma. A microorganism or cell culture transformed with an expression vector comprising nucleic acid encoding the non-human mammalian interferon is useful for producing a polypeptide consisting of the amino acid sequence of a non-human mammalian IFN. The non-human animal IFNs are useful in the prophylactic or therapeutic treatment of non-human animals, in particular for viral infections, and malignant and immunosuppressed or immunodeficient conditions. Bovine IFNs find use in treating respiratory complex in cattle. This sequence represents an oligonucleotide used to incorporate a peptide encoding an ATG translation initiation codon, DNA encoding which is incorporated into a plasmid for expressing porcine interferon-alpha (IFN-alpha).

XX Sequence 18 BP; 4 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 1.5e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 495 GTACACGCTGACGTGCT 512
D5 1 GTACACGCTGACGGACT 18

RESULT 1520
ABK13419
ID ABK13419 standard; DNA; 18 BP.
XX
AC ABK13419;
DT 23-APR-2002 (first entry)
XX
DE Drosophila genghis khan, gek, PCR primer GK3.
XX
KW Fruit fly; ss; rotkehlchen; rot; insecticide; MVST; acaricide;
KW genghis khan; gek; GK3; PCR; primer.
XX
OS Drosophila melanogaster.
XX
XX WO200200864-A2.
XX
PD 03-JAN-2002.
XX
PF 08-JUN-2001; 2001WO-EP006505.
XX
PR 27-JUN-2000; 2000EP-00113527.
XX
PA (AVET) AVENTIS CROPS SCIENCE GMBH.
XX
PI Pankratz MJ, Zinke I, Luenmen P, Benting J, Gunkel N;
XX
XX WPI; 2002-130888/17.
XX
XX Novel isolated DNA molecule encoding protein having biological activity of histone acetyltransferase which is useful for screening histone acetyltransferase inhibitors that serve as insecticides and acaricides.
XX
XX Example B; Page 21; 61pp; English.
XX
XX The invention relates to an isolated DNA molecule comprising a DNA sequence which encodes an insect histone acetyltransferase (HAT a member of the MYST family which regulates food uptake) and is either the Rotkehlchen (rot) gene or the rot cDNA, or their fragments, derivatives or allelic variants. Also included are a vector comprising the nucleic acid, a eukaryotic cell harbouring the vector or nucleic acids and an

assay for detecting inhibitor molecules that have an effect on the biochemical activity of HAT when compared with the non-treated control protein in presence of suitable substrate, buffer and assay conditions. The vector is useful for the recombinant production of ROT. ROT is useful for the biochemical or structural characterisation of the potential inhibitors of the encoded protein. The inhibitor, in appropriate chemical compositions, is useful for an insect controlling method based on specific inhibition or sufficient reduction of activity of the native target protein (Rotkehlchen (ROT) protein which is a HAT that belongs to the so called MYST family of HAT) in an insect. ROT protein is useful as insecticide or acaricide. The inhibitor has agrochemistry, veterinary and pharmaceutical applications. The present sequence is a PCR primer used to isolate sequences encoding the ROT protein, in this case being derived from the adjacent gene genghis khan, gek

XX Sequence 18 BP; 4 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 1.5e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2068 GCGCCTTCGACGACTAC 2085
D5 1 GCGCCTTCGACGACTAC 18

RESULT 1521
AAD36203
ID AAD36203 standard; DNA; 18 BP.
XX
AC AAD36203;
DT 09-AUG-2002 (first entry)
XX
DE Human Smad6 antisense oligonucleotide, ISIS #28571.
XX
KW Human; Smad6 protein; antisense; cardiovascular disease; infection; inflammation; cancer; therapy; phosphorothioate backbone; ss.
XX
OS Homo sapiens.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..18
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone"
FT modified_base 1..4
FT /tag= b
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 10
FT /tag= d
FT /mod_base= m5c
FT modified_base 15..18
FT /tag= c
FT /note= "2'methoxyethyl nucleotides"
XX
PN WO200228878-A1.
XX
PD 11-APR-2002.
XX
PF 01-OCT-2001; 2001WO-US030645.
XX
PR 04-OCT-2000; 2000US-00679298.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Cowser LM;
XX
XX WPI; 2002-394345/42.
XX
XX Oligonucleotides, useful for the modulation of Smad6 expression in the treatment or prophylaxis of e.g. cardiovascular disease, are targeted to

XX colon cell proliferative disorder; non methylated CpG dinucleotide;
 KW cytosinatic; cancer; adenoma; carcinoma; cytosine methylation state; ss;
 KW probe.
 XX Unidentified.
 XX WO2003072821-A2.
 XX 04-SEP-2003.
 XX 27-FEB-2003; 2003WO-EP002035.
 XX 27-FEB-2002; 2002EP-00004551.
 XX (EPIG-) EPIGENOMICS AG.
 XX Adorjan P, Burger M, Maier S, Nimmrich I, Becker E, Lesche R;
 XX Rujan T, Schmitt A;
 XX WPI; 2003-731620/69.
 XX Detecting and differentiating between colon cell proliferative disorders
 PT associated with a gene or its regulatory regions comprises contacting a
 PT target nucleic acid in a biological sample obtained from the subject with
 PT a reagent.
 XX Claim 36; Page 30; 74pp; English.
 XX The invention relates to a novel method for detecting and differentiating
 CC between colon cell proliferative disorders associated with at least one
 CC gene or its regulatory regions. The method comprises contacting a target
 CC nucleic acid in a biological sample obtained from the subject with at
 CC least one reagent or a series of reagents, where the reagent or series of
 CC reagents, distinguishes between methylated and non methylated CpG
 CC dinucleotides within the target nucleic acid. The molecules of the
 CC invention demonstrate cytostatic activity whilst the method may be useful
 CC for detecting and differentiating between colon cell proliferative
 CC disorders, including cancers such as colon adenoma and colon carcinoma.
 CC The PNA (peptide nucleic acid)-oligomers are useful as probes for
 CC determining cytosine methylation state or single nucleotide
 CC polymorphisms. The current sequence is that of the hybridisation
 CC oligonucleotide of the invention which was used to analyse the genomic
 CC DNA region.
 XX
 SQ Sequence 18 BP; 2 A; 0 C; 8 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 18;
 Best Local Similarity 88.9%; Pred. No. 1.5e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1379 ACAAAACATCATCAACC 1396
 DB 18 ACAAAACATCATCCCCC 1
 RESULT 1525
 ADD44208/c
 ID ADD44208 standard; DNA; 18 BP.
 XX
 AC ADD44208;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE Carboxypeptidase G2 (CPG2) enzyme mutagenic oligonucleotide OL573.
 KW bacterial enzyme; carboxypeptidase G2; CPG2; non-immunogenic;
 KW immunogenic; T-cell epitope; MHC class II binding ligand;
 KW immunostimulant; enzyme therapy; immune response;
 KW gene directed enzyme produg strategy; vaccine; enzyme; EC 3.4.17.11;
 KW mutagenic; ss.
 XX Synthetic.
 OS Pseudomonas sp. RS-16.

OS Pseudomonas sp. RS-16.
 XX WO2003045426-A1.
 XX 05-JUN-2003.
 XX 27-NOV-2002; 2002WO-EP013351.
 XX 29-NOV-2001; 2001EP-00128519.
 PR 25-JAN-2002; 2002EP-00001778.
 PR 13-SEP-2002; 2002EP-00020634.
 XX (MERE) MERCK PATENT GMBH.
 XX Hellendoorn K, Baker M, Williams S, Carr FJ;
 XX WPI; 2003-513617/48.
 XX New modified bacterial enzyme carboxypeptidase G2 (CPG2) having
 PT substantially non-immunogenic or less immunogenic than any non-modified
 PT CPG2, useful for inducing an immune response in a human host.
 XX Example 4; Page 36; 52pp; English.
 PS The invention relates to a novel modified bacterial enzyme
 CC carboxypeptidase G2 (CPG2). The modified enzyme can result in CPG2
 CC proteins that are substantially non-immunogenic or less immunogenic than
 CC any non-modified CPG2 having essentially the same biological specificity
 CC when used in vivo, and comprising specific amino acid residues having
 CC alterations compared with the non-modified parochial enzyme. The
 CC epitope sequences, which act in the parental enzyme as MHC class II
 CC binding ligands and stimulate T-cells. The modified CPG2 enzyme and the
 CC CPG2 proteins have immunostimulant activity and may be used in enzyme
 CC therapy. The modified CPG2 enzyme may be used to induce an immune
 CC response in a human host, or as a therapeutic entity such as the gene
 CC directed enzyme produg strategy. The peptide is useful for the
 CC manufacture of a modified CPG2 enzyme having substantially no or less
 CC immunogenicity than any non-modified parental enzyme when used in vivo,
 CC and for vaccination of patients to reduce immunogenicity to CPG2 in vivo.
 CC This polynucleotide sequence represents a mutagenic oligonucleotide used
 CC in the production of a modified CPG2 gene of the invention.
 XX Sequence 18 BP; 7 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.8; DB 1; Length 18;
 Best Local Similarity 88.9%; Pred. No. 1.5e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2754 TACCTTTTATGCAAAAGG 2771
 DB 18 TACCTTTTATGTAACGG 1
 RESULT 1526
 ADD44224
 ID ADD44224 standard; DNA; 18 BP.
 XX
 AC ADD44224;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE Carboxypeptidase G2 (CPG2) enzyme mutagenic oligonucleotide OL589.
 KW bacterial enzyme; carboxypeptidase G2; CPG2; non-immunogenic;
 KW immunogenic; T-cell epitope; MHC class II binding ligand;
 KW immunostimulant; enzyme therapy; immune response;
 KW gene directed enzyme produg strategy; vaccine; enzyme; EC 3.4.17.11;
 KW mutagenic; ss.
 XX Synthetic.
 OS Pseudomonas sp. RS-16.
 XX

PN WO2003045426-A1.
 XX
 PD 05-JUN-2003.
 XX
 XX 27-NOV-2002; 2002WO-EP013351.
 XX
 PR 29-NOV-2001; 2001EP-00128519.
 PR 25-JAN-2002; 2002EP-00001778.
 PR 13-SEP-2002; 2002EP-00020634.
 XX
 PA (MERE) MERCK PATENT GMBH.
 XX
 PI Hellendoorn K, Baker M, Williams S, Carr FJ;
 XX
 DR WPI; 2003-513617/48.
 XX
 XX New modified bacterial enzyme carboxypeptidase G2 (CPG2) having
 PT substantially non-immunogenic or less immunogenic than any non-modified
 PT CPG2, useful for inducing an immune response in a human host.
 XX
 PS Example 4; Page 37; 52pp; English.
 XX
 CC The invention relates to a novel modified bacterial enzyme
 CC carboxypeptidase G2 (CPG2). The modified enzyme can result in CPG2
 CC proteins that are substantially non-immunogenic or less immunogenic than
 CC any non-modified CPG2 having essentially the same biological specificity
 CC when used in vivo, and comprising specific amino acid residues having
 CC alterations compared with the non-modified parochial enzyme. The
 CC alterations cause a reduction or an elimination of one or more of T-cell
 CC epitope sequences, which act in the parental enzyme as MHC class II
 CC binding ligands and stimulate T-cells. The modified CPG2 enzyme and the
 CC CPG2 proteins have immunostimulant activity and may be used in enzyme
 CC therapy. The modified CPG2 enzyme may be used to induce an immune
 CC response in a human host, or as a therapeutic entity such as the gene
 CC directed enzyme producing strategy. The peptide is useful for the
 CC manufacture of a modified CPG2 enzyme having substantially no or less
 CC immunogenicity than any non-modified parental enzyme when used in vivo,
 CC and for vaccination of patients to reduce immunogenicity to CPG2 in vivo.
 CC This polynucleotide sequence represents a mutagenic oligonucleotide used
 CC in the production of a modified CPG2 gene of the invention.
 XX
 XX Sequence 18 BP; 5 A; 3 C; 3 G; 7 T; 0 U; 0 Other;
 SQ

Query Match 0.4%; Score 14.8; DB 1; Length 18;
 Best Local Similarity 88.9%; Pred. No. 1.5e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2754 TACCTTTTATGCAAAAGG 2771
 DB 1 TACCTTTTATGTAACCG 18
 |||||
 |||||

RESULT 1527
 ADG37249
 ID ADG37249 standard; DNA; 18 BP.
 XX
 AC ADG37249;
 XX
 XX 26-FEB-2004 (first entry)
 DT
 XX
 DE 6XHIS tag associated primer.
 XX
 XX ss; screening; human; G protein coupled receptor; GPCR;
 KW lipid bilayer membrane; fusion protein; G-alpha 16; G-alpha 12;
 KW G-alpha S2; orphan GPCR;
 KW G protein conjugation seven-transmembrane-type receptor; primer.
 XX
 OS synthetic.
 XX
 XX JP2003210192-A.
 PN
 XX 29-JUL-2003.
 PD
 XX

PF 18-JAN-2002; 2002JP-00010871.
 XX
 PR 18-JAN-2002; 2002JP-00010871.
 XX
 XX (SUMU) SUMITOMO SEIYAKU KK.
 PA
 XX WPI; 2003-819838/77.
 DR
 XX Screening ligands for G protein coupled receptor comprises lipid bilayer
 PT membrane containing embedded fusion protein comprising target G protein
 PT coupled receptor and G alpha protein.
 XX
 PS Example 1; SEQ ID NO 12; 29pp; Japanese.
 XX
 CC This invention describes a novel system of screening for ligands of the
 CC human G protein coupled receptor (GPCR). The method comprises a lipid
 CC bilayer membrane in which a fusion protein comprising target GPCR and G-
 CC alpha 16 or G-alpha 12 or G-alpha S2 is embedded. The invention also
 CC discloses a second screening system where an orphan GPCR (G protein
 CC conjugation seven-transmembrane-type receptor) is used to screen compound
 CC having agonist and/or antagonist activity for the GPCR and to screen low
 CC molecular non-peptide ligands. The screening is rapid and favourable.
 XX
 XX Sequence 18 BP; 5 A; 0 C; 7 G; 6 T; 0 U; 0 Other;
 SQ

Query Match 0.4%; Score 14.8; DB 1; Length 18;
 Best Local Similarity 88.9%; Pred. No. 1.5e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1351 ATGGAGATGATGAGATG 1368
 DB 1 ATGGTGATGATGATGATG 18
 |||||
 |||||

RESULT 1528
 ADG36975
 ID ADG36975 standard; DNA; 18 BP.
 XX
 AC ADG36975;
 XX
 XX 26-FEB-2004 (first entry)
 DT
 XX
 DE Hisx6 linker #2.
 XX
 KW GPCR; G protein-coupled receptor; C-PLACE 1003238; ss; G16 alpha;
 KW G12 alpha; uropathic; gynaecological; GDP/GTP exchange reaction;
 KW urinary tract disease; placental disease; tonsil disease; Hisx6; linker.
 XX
 OS Synthetic.
 XX
 XX JP2003232790-A.
 PN
 XX 22-AUG-2003.
 PD
 XX 12-FEB-2002; 2002JP-00034569.
 PF
 XX 12-FEB-2002; 2002JP-00034569.
 PR
 XX (SUMU) SUMITOMO SEIYAKU KK.
 PA
 XX WPI; 2004-014845/02.
 DR
 XX Ligand screening system comprising a component which is a lipid bilayer
 PT membrane that contains C-PLACE1003238 and a region concerned in binding
 PT of G-protein.
 XX
 PS Example 1; SEQ ID NO 13; 28pp; Japanese.
 XX
 CC The invention relates to a screening system of a ligand with respect to C
 CC -PLACE1003238 (a GPCR), where a ligand-receptor interaction promotes
 CC activity of GDP or GTP exchange reaction of G-protein subunits comprises,
 CC a component which is a lipid bilayer membrane that contains a polypeptide
 CC having a region which is concerned in binding with guanine nucleotide in

CC G protein-coupling receptor (GPCR) of the G-protein alpha (G16 alpha or
 CC G12 alpha) subunit that belongs to the Gi family. Also included are
 CC screening a ligand (involving comparing the effect of effector when
 CC interacting with ligand in presence or absence of the test material),
 CC producing a prophylactic and therapeutic agent of diseases of the urinary
 CC tract, placenta or tonsil (involving mixing the effector and a carrier),
 CC identifying a marker substance of the disease in the urinary tract,
 CC placenta or tonsil (involving comparing the presence of ligand identified
 CC in the biological sample derived tonsils obtained from patients and
 CC normal humans), diagnosing disease in urinary tract, placenta or tonsil
 CC and an antibody recognising the peptide which consists of amino acids 12-
 CC 36 of C-PLACE1003238. The screening system is useful for screening for
 CC the ligand which is useful in treating and preventing the disease in the
 CC tissue of urinary organ, placenta or tonsil. Hisx6 fusion proteins were
 CC constructed with human G16 alpha and G12 alpha for use in the screening
 CC system. The present sequence is a Hisx6 linker used in the construction
 CC of the fusion proteins.

XX
 SQ Sequence 18 BP; 5 A; 0 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 18;
 Best Local Similarity 88.9%; Pred. No. 1.5e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1351 ATGCAGATGATGAGATG 1368
 ||||| ||||| ||||| |||||
 Db 1 ATGGTGATGATGATG 18

RESULT 1529
 ADJ53735/C
 ID ADJ53735 standard; RNA; 18 BP.
 XX
 AC ADJ53735;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE HBV specific molecular beacon target #4.
 XX
 KW ss; capture oligonucleotide; HBV; HIV-1; HCV; donated blood screening.
 XX
 OS Hepatitis B virus.
 XX
 PN WO2003106714-A1.
 XX
 PD 24-DEC-2003.
 XX
 PF 13-JUN-2003; 2003WO-US018993.
 XX
 PR 14-JUN-2002; 2002US-0389393P.
 XX
 PA (GENP-) GEN-PROBE INC.
 XX
 PI Linnen JM, Kolk DP, Dockter JM, Getman DK, Yoshimura T;
 PI Ho-Sing-Loy M, Stringfellow LA;
 XX
 DR WPI; 2004-082210/08.
 XX
 PT Capture oligonucleotide composition useful for detection of hepatitis B
 PT virus (HBV), comprising polynucleotide having HBV-complementary sequence
 PT which is immobilised on solid support.
 XX
 PS Claim 22; SEQ ID NO 129; 112pp; English.

XX The invention relates to a capture oligonucleotide composition comprising
 CC an hepatitis B virus (HBV)-complementary sequence polynucleotide
 CC immobilised to a solid support. The composition is useful for detecting
 CC nucleic acids of HBV and/or HIV-1 and/or HCV in biological sample such as
 CC blood, serum, plasma or other body fluid or tissue to be tested. The
 CC composition can be used either in diagnostic application or for screening
 CC donated blood and that products or other tissues that may contain
 CC infectious particles. The composition facilitates detection of very low
 CC levels of HBV nucleic acids. The composition allows selective detection

CC of nucleic acids of HBV and/or HIV and/or HCV. The present sequence is
 CC used in the exemplification of the invention.

XX
 SQ Sequence 18 BP; 8 A; 2 C; 7 G; 0 T; 1 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 18;
 Best Local Similarity 88.9%; Pred. No. 1.5e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 925 TTCCTGTTTCATCTGCTG 942
 ||||| ||||| ||||| |||||
 Db 18 TTCCTGTTTCATCTGCTG 1

RESULT 1530
 AAT77620/C
 ID AAT77620 standard; DNA; 19 BP.

XX
 AC AAT77620;
 XX
 DT 11-SEP-1997 (first entry)
 XX
 DE Wheat microsatellite WMS179 right primer.

XX Microsatellite marker; hypervariable genomic fragment; Triticum aestivum;
 KW wheat; Triticeae; sequence tagged site; STS; primer; PCR; amplify;
 KW polymorphism; genetic analysis; hexaploid; tetraploid; mapping; ss.

XX Synthetic.
 XX
 PN DE19525284-A1.
 XX
 PD 02-JAN-1997.

PF 28-JUN-1995; 95DE-01025284.

PR 28-JUN-1995; 95DE-01025284.

XX (PFLA-) INST PFLANZENGENETIK & KULTURPFLANZENFOR.

XX Roeder M, Plaschke J, Ganai M;

PI WPI; 1997-053731/06.

XX Primers for STS microsatellite markers for wheat and related species -
 PT useful for genetic mapping, analysis and labelling etc. of wheat.

XX Claim 5; Page 7; 8pp; German.

XX Microsatellite markers based on hypervariable genomic fragments, from
 CC Triticum aestivum (wheat) or the tribe Triticeae, consist of a sequence
 CC tagged site (STS), defined by 2 specific primers (of mean size 17-23
 CC bases) that flank a microsatellite sequence at both ends, which can be
 CC amplified to polymorphisms (PCR products of different sizes). The
 CC microsatellites are n-fold tandem repeats (n = 10 or more) of di-, tri-,
 CC or tetra-nucleotide sequences, combination microsatellite sequences or an
 CC imperfect sequence in which individual bases are mutated. The
 CC microsatellite markers can be used for genetic analysis of hexaploid and
 CC tetraploid forms of wheat and for genetic mapping or labelling of
 CC monogenic and polygenic properties, and for their selection; for
 CC analysing relationships and identifying varieties; and for evaluating
 CC varietal purity, hybrid identification and plant growth. The markers can
 CC differentiate between almost all European wheat lines and show a higher
 CC degree of DNA polymorphism than known probes for the wheat genome. They
 CC can be detected by PCR, so large numbers of samples can be analysed
 CC easily (e.g. several hundred per day). Microsatellite marker-related
 CC polymorphisms are stably inherited so can also serve as genetic markers.
 CC AAT77003-22 and AAT77535-716 are primer pairs that define the
 CC microsatellite markers. WMS179 has a GT type repeat

XX Sequence 19 BP; 5 A; 9 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;

Best Local Similarity 88.9%; Pred. No. 1.6e+03; Mismatches 0; Indels 0; Gaps 0;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 404 AGTGGAGCTGGTCATGG 421
DB 18 AGTGGATGCTGGTCATGG 1

RESULT 1531
AAV22618
ID AAV22618 standard; DNA; 19 BP.
XX
AC AAV22618;
DT 08-JUL-1998 (first entry)
XX
DE Adhalin gene fragment where muscular dystrophy causing mutation occurs.
XX
KW Human; adhalin gene; dystrophin-associated protein; muscular dystrophy;
KW detection; mutation; primary adhalinopathy;
KW Duchenne-like autosomal recessive muscular dystrophy; probe; ds.
XX
OS Homo sapiens.
XX
PN US5733732-A.
XX
PD 31-MAR-1998.
XX
PF 03-JAN-1996; 96US-00582539.
XX
PR 03-JAN-1996; 96US-00582539.
XX
PA (IOWA) UNIV IOWA RES FOUND.
XX
PI Piccolo P, Kaplan J, Jeanpierre M, Roberds SL, Campbell KP;
PI Sunada Y;
XX
DR WPI; 1998-229819/20.
XX
XX Genetic detection of primary adhalinopathies - using nucleic acid probes
PT which bind to mutant adhalin genes but not the wild type gene.
XX
PS Disclosure; Col 15; 14pp; English.
XX
CC The present sequence represents a fragment of the human adhalin gene
CC where a mutation causing muscular dystrophy can occur (see AAV22617).
CC Adhalin belongs to the sarcolemmal complex of dystrophin-associated
CC proteins. Mutations in the adhalin protein are one of the causes of
CC muscular dystrophy. A new method for the detection of a mutation in the
CC human adhalin gene, comprises incubating a sample with a nucleic acid
CC probe (e.g. AAV22617). The probe specifically hybridises to the mutant
CC form of the gene but not the wild type. Any specific hybridisation is
CC then detected. The method is useful for detecting mutations in the human
CC adhalin gene which lead to primary adhalinopathy, a Duchenne-like
CC autosomal recessive muscular dystrophy
XX
SQ Sequence 19 BP; 3 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 752 TGCAACACGTCACCTTTG 769.
DB 1 TGCTCACGTCACCTCTG 18

RESULT 1532
AAV41059
ID AAV41059 standard; DNA; 19 BP.
XX
AC AAV41059;
DT 27-SEP-1999 (first entry)
XX

DT 25-SEP-1998 (first entry)
XX
DE Primer ALL1ENL.4195L19 for abnormality detection.
XX
KW PCR primer; chromosomal abnormality; abnormality detection; leukaemia;
KW lymphoma; carcinoma; adenocarcinoma; sarcoma; glioma; neuroblastoma;
KW medullablastoma; malignant melanoma; malignant neoplastic condition; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9824928-A2.
XX
PD 11-JUN-1998.
XX
PF 08-DEC-1997; 97WO-DK000556.
XX
PR 06-DEC-1996; 96DK-00001401.
XX
PA (PALL/) PALLISGAARD N.
XX
PI Pallisgaard N, Hokland P;
XX
DR WPI; 1998-333344/29.
XX
CC Detection of chromosomal abnormalities - by subjecting patient sample
PT nucleic acids to a multiplex molecular amplification procedure using
PT primers specific for characteristic nucleic acid sequence.
XX
PS Claim 73; Page 105; 126pp; English.
XX
CC This sequence represents a primer used in the method of the invention for
CC the detection of the presence or absence of chromosomal abnormalities,
CC each abnormality being associated with a condition in a subject and each
CC being defined by at least one characteristic nucleic acid sequence. The
CC method comprises: (a) obtaining a sample of nucleic acids derived from a
CC subject which may harbour one of the chromosomal abnormalities; (b)
CC subjecting the sample to a multiplex molecular amplification (MMA)
CC procedure, where a number of the characteristic sequences, if present in
CC a sufficient amount, will be amplified; (c) retrieving the product(s)
CC from step (b), and detecting the presence and/or absence of an amplicon
CC characteristic of the abnormal sequences to detect the presence or
CC absence of corresponding chromosomal abnormalities; where the MMA
CC procedure comprises the use of at least 7 mutually distinct primers (MDP)
CC in one single reaction mixture, each of the primers defining an end of at
CC least one characteristic nucleic acid sequence, and where at least one of
CC the primers defines the first end of at least two characteristic nucleic
CC acid sequences, the characteristic nucleic acid sequences each being
CC determined in their opposite ends by MDP selected from the remainder of
CC the MDP. The methods can be used for detecting chromosomal abnormalities
CC associated with diseases including numerous leukaemia's, lymphoma's,
CC carcinoma's, adenocarcinoma's, sarcoma's, glioma's, neuroblastoma's,
CC medullablastoma, malignant melanoma, and malignant neoplastic conditions
XX
SQ Sequence 19 BP; 0 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 CTACGGGGTGGGCTTCTT 926
DB 2 CTCCTGGTGGGCTTCTT 19

RESULT 1533
AAZ01389
ID AAZ01389 standard; DNA; 19 BP.
XX
AC AAZ01389;
XX
DT 27-SEP-1999 (first entry)
XX

```

DE PCR primer for PGI biallelic marker 99-128-202.
XX PGI gene; biallelic marker; PCR primer; PGI-related biallelic marker;
KW cancer; prostate cancer; diagnosis; therapy; prostate specific antigen;
KW PSA; human; ss.
XX Synthetic.
OS Homo sapiens.
XX WO9932644-A2.
XX 01-JUL-1999.
XX 22-DEC-1998; 98WO-IB002133.
XX 22-DEC-1997; 97US-00996306.
PR 09-SEP-1998; 98US-0099658P.
XX (GEST ) GENSET.
XX Cohen D, Blumenfeld M, Chumakov I, Bougueleret L;
PI WPI; 1999-405178/34.
XX Use of a prostate cancer associated gene and biallelic markers derived
PT from it.
XX Claim 4; Page 379; 385pp; English.
XX The invention relates to a mammalian PGI gene and protein, and a set of
CC PGI biallelic markers. The PGI polynucleotide and biallelic markers are
CC used in a hybridisation assay, a sequencing assay, or in an allele-
CC specific amplification assay for determining the identity of a nucleotide
CC at a PGI-related biallelic marker. The methods can be used to detect and
CC to assess the risk of developing cancer or prostate cancer. Early-stage
CC diagnosis of prostate cancer relies on prostate specific antigen (PSA)
CC dosage. However, the effectiveness of this is limited due to its
CC inability to discriminate between malignant and non-malignant affections
CC of the organ. A need exists for both a reliable diagnostic procedure
CC which would enable early-stage diagnosis, and for preventative and
CC curative treatments of the disease. The PGI gene can be used for
CC detection of prostate cancer, and the risk of developing it in the
CC future, and can also be used to determine therapies for the disease
XX
SQ Sequence 19 BP; 2 A; 0 C; 7 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2315 GTCTGTGTGTGTGTGTGT 2332
DB 1 GTATGTGTGTGTGTGTGT 18

RESULT 1534
AAZ01326
ID AAZ01326 standard; DNA; 19 BP.
XX
XX AAZ01326;
XX
XX 27-SEP-1999 (first entry)
XX
XX PCR primer for PGI biallelic marker 99-148-129.
XX PGI gene; biallelic marker; PCR primer; PGI-related biallelic marker;
KW cancer; prostate cancer; diagnosis; therapy; prostate specific antigen;
KW PSA; human; ss.
XX Synthetic.
OS Homo sapiens.
XX WO9932644-A2.
XX 01-JUL-1999.
XX 22-DEC-1998; 98WO-IB002133.
XX 22-DEC-1997; 97US-00996306.
PR 09-SEP-1998; 98US-0099658P.
XX (GEST ) GENSET.
XX Cohen D, Blumenfeld M, Chumakov I, Bougueleret L;
PI WPI; 1999-405178/34.
XX Use of a prostate cancer associated gene and biallelic markers derived
PT from it.
XX Claim 4; Page 379; 385pp; English.
XX The invention relates to a mammalian PGI gene and protein, and a set of
CC PGI biallelic markers. The PGI polynucleotide and biallelic markers are
CC used in a hybridisation assay, a sequencing assay, or in an allele-
CC specific amplification assay for determining the identity of a nucleotide
CC at a PGI-related biallelic marker. The methods can be used to detect and
CC to assess the risk of developing cancer or prostate cancer. Early-stage
CC diagnosis of prostate cancer relies on prostate specific antigen (PSA)
CC dosage. However, the effectiveness of this is limited due to its
CC inability to discriminate between malignant and non-malignant affections
CC of the organ. A need exists for both a reliable diagnostic procedure
CC which would enable early-stage diagnosis, and for preventative and
CC curative treatments of the disease. The PGI gene can be used for
CC detection of prostate cancer, and the risk of developing it in the
CC future, and can also be used to determine therapies for the disease
XX
SQ Sequence 19 BP; 2 A; 0 C; 7 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2315 GTCTGTGTGTGTGTGTGT 2332
DB 1 GTATGTGTGTGTGTGTGT 18

RESULT 1535
AAF60558
ID AAF60558 standard; DNA; 19 BP.
XX
XX AAF60558;
XX
XX 27-APR-2001 (first entry)
XX
XX Yeast URA3 PCR primer RAG515.
XX
XX Yeast; PCR primer; URA3; chromosomal rearrangement; double strand break;
KW ss.
XX Saccharomyces cerevisiae.
XX
XX US6183969-B1.
XX
XX 06-FEB-2001.
XX
XX 15-APR-1999; 99US-00293569.
XX
XX 15-APR-1999; 99US-00293569.
XX
XX (RUTF ) UNIV RUTGERS STATE NEW JERSEY.
XX
XX Gabriel A;
XX
XX WPI; 2001-181858/18.

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XX Intron-based assay for detecting chromosomal rearrangements in eukaryotic
PT cells, by engineering the cells to contain a selectable marker gene with
PT a site for generating a double strand break within the intron of the
PT cell.

XX Example 1; Col 18; 16pp; English.

XX The present invention relates to an assay for detecting chromosomal
CC rearrangements (CR) in eukaryotic cells. The assay comprises engineering
CC the cell to contain a selectable marker gene with a site for generating a
CC double strand break (ds break) within an intron of the cell; generating
CC the ds break; detecting cells which repair the ds break, isolating DNA
CC from the detected cells, and characterising the CR. The present sequence
CC is a PCR primer for yeast URA3, which was used in the present invention
CC to construct a URA3::actin intron::HO cut site yeast strain

XX Sequence 19 BP; 4 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1050 GGAGTCCACGCGTCCAT 1067

DB 1 GGAGTTCAATGCGTCCAT 18

RESULT 1536

ABL89109/c
ID ABL89109 standard; DNA; 19 BP.

XX ABL89109;

XX 22-MAY-2002 (first entry)

DE HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:331.

XX Binding molecule; HIV-1; human immunodeficiency virus type 1;
KW reverse transcriptase; binding group; ss.

XX Human immunodeficiency virus 1.
OS Synthetic.

XX EP1174518-A1.

XX 23-JAN-2002.

XX 20-JUL-2000; 2000EP-00202611.

XX 20-JUL-2000; 2000EP-00202611.

XX (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.

XX Loukachov VV, Van Gemen B, Goudsmit J;

XX WPI; 2002-156696/21.

XX Collection of binding groups for determining or typing samples,
PT especially clinical samples, has groups capable to identify essentially
PT all members of the family of nucleic acids of relatively high
PT significance.

XX Disclosure; Page 87; 166pp; English.

XX The present invention describes a collection of binding groups for a
CC family of nucleic acids comprising members of relative high and relative
CC low significance, where the binding groups are selected to be capable to
CC identify, alone or in combination, essentially all members of the family
CC of nucleic acids of relatively high significance. The collection of
CC binding groups is useful for typing of nucleic acid in a clinical sample,
CC by contacting the nucleic acid with the collection and determining
CC whether one or more binding groups bound to the nucleic acid of the

CC sample. This method is useful for determining whether the sample
CC comprises at least a part of a member of relatively high significance of
CC a family of nucleic acids. The collection of binding groups is useful for
CC diagnosing the severity of a disease caused by a pathogen containing a
CC member of a family of nucleic acids. ABL88779 to ABL89321 represent
CC oligonucleotide sequences used in the exemplification of the present
CC invention

XX Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3609 CGTTCGTACTGTACTG 3626

DB 18 CGTCCAGTACTGTACTG 1

RESULT 1537

AAD44897/c
ID AAD44897 standard; DNA; 19 BP.

XX AAD44897;

XX 13-DEC-2002 (first entry)

DE 2038 PCR primer used to create constructs using OER method.

XX Orientation-directed construction; genetic vector; PCR; primer;
KW orientation enrichment reaction; OER; ss.

XX Unidentified.

XX WO200264774-A2.

XX 22-AUG-2002.

XX 11-FEB-2002; 2002WO-11000104.

XX 12-FEB-2001; 2001IL-00141392.

XX (GENE-) GENE BIO APPL LTD.

XX Ben-Asouli Y, Osman F;

XX WPI; 2002-667004/71.

XX Orientation-directed construction of a construct comprises performing
PT polymerase chain reaction amplification using combined ligated sequences
PT as a template and enrichment primers directing the amplification towards
PT the desired orientation.

XX Example 2; Page 35; 60pp; English.

XX The invention relates to a method for orientation-directed construction
CC of a construct comprising at least two nucleic acid segments of interest.
CC The method involves performing polymerase chain reaction (PCR)
CC amplification reaction using the combined ligated sequences as template
CC and specific enrichment primers directing the PCR amplification towards
CC the desired orientation where each combined ligated sequence is amplified
CC in a separate reaction creating a combined product having phosphorylated
CC blunt ends. The method is useful for generating constructs or genetic
CC vectors specifically for orientation-directed construction of a mutated
CC DNA construct having at least one mutation. The present sequence is a PCR
CC primer used to create constructs using the orientation enrichment
CC reaction (OER) method of the invention

XX Sequence 19 BP; 5 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

OY 3651 CTTGCTTCCTGCAGGGC 3668
DB 18 CTTGCATGCTGCAGGTC 1

RESULT 1538
ID AAD4911/C
AC AAD4911;
XX
XX 13-DEC-2002 (first entry)
XX
XX DNA fragment II used to illustrate the OER method of the invention.
XX
XX Orientation-directed construction; orientation enrichment reaction;
XX genetic vector; OER; ds.
XX
XX Unidentified.
XX
XX WO200264774-A2.
XX
XX 22-AUG-2002.
XX
XX 11-FEB-2002; 2002WO-IL000104.
XX
XX 12-FEB-2001; 2001IL-00141392.
XX
XX (GENE-) GENE BIO APPL LTD.
XX
XX Ben-Asouli Y, Osman F;
XX
XX WPI; 2002-667004/71.
XX
XX Orientation-directed construction of a construct comprises performing
XX polymerase chain reaction amplification using combined ligated sequences
XX as a template and enrichment primers directing the amplification towards
XX the desired orientation.
XX
XX Disclosure; Fig 1; 60pp; English.
XX
XX The invention relates to a method for orientation-directed construction
XX of a construct comprising at least two nucleic acid segments of interest.
XX The method involves performing polymerase chain reaction (PCR)
XX amplification reaction using the combined ligated sequences as template
XX and specific enrichment primers directing the PCR amplification towards
XX the desired orientation where each combined ligated sequence is amplified
XX in a separate reaction creating a combined product having phosphorylated
XX vectors specifically for orientation-directed construction of a genetic
XX DNA construct having at least one mutation. The present sequence is a DNA
XX fragment used to illustrate the orientation enrichment reaction (OER)
XX method of the invention
XX
XX Sequence 19 BP; 5 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 1.6e+03;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 3651 CTTGCTTCCTGCAGGGC 3668
DB 18 CTTGCATGCTGCAGGTC 1

RESULT 1539
ID AAD4914
XX
XX 13-DEC-2002 (first entry)
XX
XX AAD4914 standard; DNA; 19 BP.
XX
XX AAD4914;
XX
XX 13-DEC-2002 (first entry)
XX
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XX
XX DE
XX
XX KW Orientation-directed construction; orientation enrichment reaction;
XX genetic vector; OER; PCR; primer; ss.
XX
XX OS Unidentified.
XX
XX PN WO200264774-A2.
XX
XX PD 22-AUG-2002.
XX
XX PF 11-FEB-2002; 2002WO-IL000104.
XX
XX PR 12-FEB-2001; 2001IL-00141392.
XX
XX PA (GENE-) GENE BIO APPL LTD.
XX
XX PI Ben-Asouli Y, Osman F;
XX
XX DR WPI; 2002-667004/71.
XX
XX PT Orientation-directed construction of a construct comprises performing
XX polymerase chain reaction amplification using combined ligated sequences
XX as a template and enrichment primers directing the amplification towards
XX the desired orientation.
XX
XX PS Example 2; Fig 3A; 60pp; English.
XX
XX CC The invention relates to a method for orientation-directed construction
XX of a construct comprising at least two nucleic acid segments of interest.
XX The method involves performing polymerase chain reaction (PCR)
XX amplification reaction using the combined ligated sequences as template
XX and specific enrichment primers directing the PCR amplification towards
XX the desired orientation where each combined ligated sequence is amplified
XX in a separate reaction creating a combined product having phosphorylated
XX vectors specifically for orientation-directed construction of a genetic
XX DNA construct having at least one mutation. The present sequence is a PCR
XX primer used to generate pcDNA3+ construct using the orientation
XX enrichment reaction (OER) method of the invention
XX
XX SQ Sequence 19 BP; 2 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 1.6e+03;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 3651 CTTGCTTCCTGCAGGGC 3668
DB 2 CTTGCATGCTGCAGGTC 19

RESULT 1540
ID ABL44958
XX
XX ABL44958 standard; DNA; 19 BP.
XX
XX AC ABL44958;
XX
XX DT 11-APR-2002 (first entry)
XX
XX DE Human chromosome 1p36-35 PCR primer SEQ ID NO:2002.
XX
XX KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
XX PCR primer; ss.
XX
XX OS Homo sapiens.
XX
XX PN JP2001321190-A.
XX
XX PD 20-NOV-2001.
XX
XX PF 12-MAR-2001; 2001JP-00068285.
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XX PR 10-MAR-2000; 2000JP-00066716.
XX PA (RIKA ) RIKAGAKU KENKYUSHO.
XX PA (GENO-) GENOTEX YG.
XX DR WPI; 2002-144136/19.
XX XX
XX PT Arraying genome clones.
XX PS
XX PS Claim 4; Page 44; 528pp; Japanese.
XX CC The present invention describes a method of arraying genome clones. The
XX CC method comprises: (a) clones of the genomic libraries contained in
XX CC multiwell plates numbered for discrimination are mixed in each of the
XX CC multiwell plates; (b) a primer designed based on the chromosome marker
XX CC sequence is added to the mixture to carry out an amplification reaction;
XX CC (c) a signal corresponding to the marker is detected from the resultant
XX CC amplified product to specify the discrimination Nos. of the multiwell
XX CC plates containing the clones having said marker sequence; (d) the order
XX CC of the markers is changed so that the same discrimination Nos. succeed to
XX CC the maximum in the specified discrimination Nos. to array the multiwell
XX CC plates; (e) the clones in the multiwell plates of the specified
XX CC discrimination Nos. are mixed respectively in each wells of longitudinal
XX CC and lateral directions; (f) the mixed clones are cultured and the
XX CC resultant cultures are amplified by using the above primer; (g) signals
XX CC are detected from the amplified products; (h) the clones in the multiwell
XX CC plates are specified from the detected result; and (i) the clones are
XX CC reconstituted as the positions on the chromosome and arrayed. The
XX CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
XX CC PCR primers for human chromosome lp36-35 DNA, and ABL45323 to ABL45634
XX CC represent PCR primers for human chromosome 21q22.1, which are
XX CC specifically claimed for use in the present invention
XX SQ Sequence 19 BP; 3 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1037 GACAGGTGTCCTGGAGT 1054
DB 1 GACAGGTGACCCGTGT 18
RESULT 1541
ABK87500/c
ID ABK87500 standard; DNA; 19 BP.
AC ABK87500;
XX
XX 24-SEP-2002 (first entry)
XX DE Myotonic dystrophy protein kinase (DMPK) mutant 3'UTR fragment.
XX KW Myotonic dystrophy; DM; protein kinase; DMPK; myocardial infarction;
XX KW muscle damage; dysfunction; CTG repeat; ds; mutant.
XX XX
XX OS Homo sapiens.
XX OS Synthetic.
XX XX
XX PN US2002061571-A1.
XX XX
XX PD 23-MAY-2002.
XX XX
XX PF 20-MAR-2001; 2001US-00813289.
XX PR 20-MAR-2000; 2000US-0190590P.
XX XX
XX PA (MAHA/) MAHADEVAN M S.
XX PA (TISC/) TISCORNIA G.
XX XX
XX P1 Mahadevan MS, Tiscornia G;

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XX DR WPI; 2002-507644/54.
XX XX
XX PT A new isoform of myotonic dystrophy protein kinase includes a sequence
XX PT encoded by exon 16 of the gene and is useful to detect presence or risk
XX PT of myotonic dystrophy, myocardial infarction or a condition associated
XX PT with muscle damage.
XX XX
XX PS Example; Page 9; 26pp; English.
XX PS
XX CC The invention describes an isolated and purified polypeptide, comprising
XX CC an amino acid sequence encoded by exon 16 of the myotonic dystrophy
XX CC protein kinase (DMPK) gene. The invention is used to detect presence or
XX CC risk of myotonic dystrophy, myocardial infarction or a condition
XX CC associated with muscle damage or dysfunction. This sequence represents a
XX CC mutant of the CTG repeat isolated from the 3' UTR of the novel Myotonic
XX CC dystrophy protein kinase (DMPK) isoform gene that results in suppression
XX CC of splicing into the 3' splice site of the gene
XX SQ Sequence 19 BP; 2 A; 5 C; 8 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3194 CCCCAGAGCTGCAGATC 3211
DB 18 CCCCAGAGCTGCAGATC 1
RESULT 1542
ABX92989/c
ID ABX92989 standard; DNA; 19 BP.
XX
XX AC ABX92989;
XX XX
XX DT 14-MAY-2003 (first entry)
XX DE Screening method related primer #40.
XX XX
XX KW G protein-coupled receptor; GPR7; primer; ss; anorectic; cibophobia;
XX KW anorexia; appetite loss; excessive appetite; obesity-related disorder;
XX KW adipocyte malignancy; obesity; excessive insulin; blood volume change;
XX KW thyroid disorder; paediatric obesity; upper body obesity;
XX KW dietary obesity; cardiac obesity; whole body adipocyte disorder.
XX XX
XX OS Synthetic.
XX XX
XX PN WO200293161-A1.
XX XX
XX PD 21-NOV-2002.
XX XX
XX PF 14-MAY-2002; 2002WO-JP004635.
XX XX
XX PR 15-MAY-2001; 2001JP-00145411.
XX XX
XX PA (TAKA ) TAKEDA CHEM IND LTD.
XX XX
XX PI Mori M, Shimomura Y, Goto M;
XX XX
XX DR WPI; 2003-129320/12.
XX XX
XX PT Screening compounds that modify the binding of G-protein coupled receptor
XX PT GPR7 to its ligands for treatment of obesity and cibophobia.
XX XX
XX PS Disclosure; Page 214; 222pp; Japanese.
XX XX
XX CC The invention relates to a method for screening compounds for their
XX CC ability to modify the binding of G protein-coupled receptor protein GPR7
XX CC to its polypeptide, ligands and their amides, esters and salts, by
XX CC measuring the binding in the presence and absence of the test compound.
XX CC The method is used for prevention and treatment of cibophobia, anorexia,
XX CC loss of appetite, excessive appetite and a broad range of obesity-related

```

CC disorders including adipocyte malignancy, obesity due to external
CC factors, excessive insulin, blood volume changes, thyroid disorders,
CC paediatric obesity, upper body obesity, dietary obesity, cardiac obesity
CC and whole body adipocyte disorder. This sequence represents a primer used
CC in the scope of the invention

XX SQ Sequence 19 BP; 4 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1876 GAGGAGCTCTTCACGCTG 1893

DB 19 GAGGAGCTCTTCACGCTG 2

RESULT 1543

ADCS1937/C

ID ADCS1937 standard; DNA; 19 BP.

XX AC ADCS1937;

XX DT 18-DEC-2003 (first entry)

XX DE GPR8 PCR primer, SEQ ID 148.

XX KW Body weight; GPR8L; brain; hyperphagia; obesity; anorectic; GPR8; PCR;
KW primer; ss.
XX OS Unidentified.
XX PN WO2003057236-A1.
XX PD 17-JUL-2003.

XX PF 27-DEC-2002; 2002WO-JF013781.

XX PR 28-DEC-2001; 2001JP-00403260.

XX PR 28-MAR-2002; 2002JP-00093096.

XX PA (TAKE) TAKEDA CHEM IND LTD.

XX PI Matsumoto H, Noguchi J, Harada M, Mori M;

XX DR WPI; 2003-569538/53.

XX PT Composition comprising peptide of brain origin binding to orphan G-
PT protein coupled receptor GPR8 for treatment and prevention of obesity and
PT hyperphagia.
XX PS Example 79; SEQ ID NO 148; 277bp; Japanese.
XX CC The present invention relates to novel compositions for inhibiting body
CC weight gain, for lowering body weight, for inhibiting fat weight gain,
CC and for suppressing appetite, which contain as active component a peptide
CC ligand (GPR8L, ADCS1805) of brain origin. The compositions can be used
CC for treatment and prevention of hyperphagia and obesity (including
CC malignant mastocytosis, exogenous obesity, hyperinsulinemic obesity,
CC hyperplasmic obesity, hypophyseal obesity, hypoplasmic obesity, infant
CC hypothyroid obesity, hypothalamic obesity, symptomatic obesity, infant
CC obesity, upper body obesity, alimentary obesity, hypogonadal obesity,
CC systemic mastocytosis, simple obesity and central obesity). The present
CC sequence was used to illustrate the invention.

XX SQ Sequence 19 BP; 4 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1876 GAGGAGCTCTTCACGCTG 1893

DB 19 GAGGAGCTCTTCACGCTG 2

DB 19 GAGGAGCTCTTCACGCTG 2

RESULT 1544

ADF49449/C

ID ADF49449 standard; RNA; 19 BP.

XX AC ADF49449;

XX DT 12-FEB-2004 (first entry)

XX DE Human BCL2 siRNA upper sequence SEQ ID NO:177.

XX KW ss; siRNA; human; BCL2; short interfering nucleic acid; RNA interference;
KW cytosolic; immunosuppressive; virucide; anti-HIV; cancer;
KW autoimmune disease; viral infection; HIV.
XX OS Homo sapiens.

XX PN WO2003070969-A2.

XX PD 28-AUG-2003.

XX PF 18-FEB-2003; 2003WO-US004908.

XX PR 20-FEB-2002; 2002US-0358580P.

XX PR 11-MAR-2002; 2002US-0363124P.

XX PR 06-JUN-2002; 2002US-0386782P.

XX PR 18-JUL-2002; 2002US-0396905P.

XX PR 29-AUG-2002; 2002US-0406784P.

XX PR 05-SEP-2002; 2002US-0408378P.

XX PR 09-SEP-2002; 2002US-0409293P.

XX PR 15-JAN-2003; 2003US-0440129P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI McSwiggen J, Beigelman L;

XX WPI; 2003-712622/67.

XX PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer or autoimmune disease, downregulates expression of
PT the BCL2 gene.
XX PS Example 3; SEQ ID NO 177; 148pp; English.
XX CC The invention relates to a novel short interfering nucleic acid (siNA)
CC that downregulates expression of the BCL2 gene by RNA interference. A
CC siNA of the invention has cytostatic, immunosuppressive, virucide, and
CC anti-HIV activity. The siNA are useful for modulation (inhibition) of
CC expression or activity of BCL2 by RNA interference. siNA are used to
CC modulate expression of BCL2 genes, in cells, tissue explants or
CC organisms, e.g. for treating cancer, autoimmune diseases and viral
CC infections (including by HIV) but also for drug screening, diagnosis,
CC target identification and validation, genetic engineering,
CC pharmacogenomics, studying gene function and gene mapping (e.g. of single
CC -nucleotide polymorphisms). The sequences shown in ADF49273-ADF50143
XX represent siNA of the invention.

XX SQ Sequence 19 BP; 1 A; 5 C; 8 G; 0 T; 5 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1262 AGGACCGGGCGCCCAAGC 1279

DB 18 AGGACCGGGCGCCCAAGC 1

RESULT 1545

ADF49863

ID ADF49863 standard; RNA; 19 BP.

```
XX ADF49863;
AC
XX RNA interference; short interfering nucleic acid; siRNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
DT short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; cancer;
XX proliferative disease; restenosis; polycystic kidney disease;
XX inflammatory disease; allergic disease; autoimmune disease;
XX transplant rejection; cytostatic; vasotrophic; nephrotropic;
XX anti-inflammatory; anti-allergic; immunosuppressive; human;
XX insulin-like growth factor 1 receptor; IGF-1R; target sequence; ss.
OS Homo sapiens.
XX
XX WO2003070969-A2.
XX
XX 28-AUG-2003.
XX
XX 18-FEB-2003; 2003WO-US004908.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 18-JUL-2002; 2002US-0396905P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L;
XX
XX WPI; 2003-712622/67.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer or autoimmune disease, downregulates expression of
XX the BCL2 gene.
XX
XX Example 3; SEQ ID NO 591; 148pp; English.
XX
XX The invention relates to a novel short interfering nucleic acid (siNA)
XX that downregulates expression of the BCL2 gene by RNA interference. A
XX siNA of the invention has cytostatic, immunosuppressive, virucide, and
XX anti-HIV activity. The siNA are useful for modulation (inhibition) of
XX expression or activity of BCL2 by RNA interference. siNA are used to
XX modulate expression of BCL2 genes, in cells, tissue explants or
XX organisms, e.g. for treating cancer, autoimmune diseases and viral
XX infections (including by HIV) but also for drug screening, diagnosis,
XX target identification and validation, genetic engineering,
XX pharmacogenomics, studying gene function and gene mapping (e.g. of single
XX -nucleotide polymorphisms). The sequences shown in ADF49273-ADF50143
XX represent siNA of the invention.
XX
XX Sequence 19 BP; 5 A; 8 C; 5 G; 0 T; 1 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 1.6e+03;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1262 AGGACCGGGCGGCACGC 1279
XX
XX 2 AGGACCGGGCGGCACGC 19
XX
XX
XX RESULT 1546
XX ADF31538
XX ID ADF31538 standard; RNA; 19 BP.
XX
XX AC ADF31538;
XX
XX 12-FEB-2004 (first entry)
XX
XX Human IGF-1R transcript target sequence/siNA upper strand, SEQ ID NO:203.
XX
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```
XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; cancer;
XX proliferative disease; restenosis; polycystic kidney disease;
XX inflammatory disease; allergic disease; autoimmune disease;
XX transplant rejection; cytostatic; vasotrophic; nephrotropic;
XX anti-inflammatory; anti-allergic; immunosuppressive; human;
XX insulin-like growth factor 1 receptor; IGF-1R; target sequence; ss.
XX
XX Homo sapiens.
XX
XX WO2003070911-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005044.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Chowrira B;
XX
XX WPI; 2003-721691/68.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer, downregulates expression of the insulin-like growth
XX factor-1 receptor gene.
XX
XX Example 3; SEQ ID NO 203; 147pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the human insulin-like growth factor 1
XX receptor (IGF-1R) gene by RNA interference. The siNAs may or may not
XX comprise ribonucleotides and may be double or single stranded. They
XX further comprise sense and antisense regions, or alternatively are
XX assembled from a sense oligonucleotide and an antisense oligonucleotide.
XX Specifically, the siNAs include short interfering RNA (siRNA), double-
XX stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
XX can be unmodified or chemically modified, can contain
XX deoxyribonucleotides, and can be chemically synthesised, expressed from a
XX vector or enzymatically synthesised. The invention also relates to kits
XX for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
XX of siNA; and vectors that express siNA. The siNAs are used to modulate
XX expression of the IGF-1R gene in cells, tissue explants or organisms
XX (e.g., by ex vivo gene therapy), or in grafts and transplants for the
XX treatment of a variety of conditions. They may be used for treating
XX cancer and other proliferative diseases (e.g., restenosis and polycystic
XX kidney disease), inflammatory and/or allergic diseases, autoimmune
XX diseases and transplant rejection. The siNAs are also useful for drug
XX screening, diagnosis, therapeutic target identification and validation,
XX genetic engineering, pharmacogenomics, studying gene function, and gene
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence
XX represents the upper strand of a human IGF-1R-targeted double-stranded
XX siNA, which is identical to the IGF-1R transcript target sequence.
XX
XX Sequence 19 BP; 1 A; 5 C; 9 G; 0 T; 4 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 66.7%; Pred. No. 1.6e+03;
XX Matches 12; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1816 GGGGTCTCTCTGGGAG 1833
XX
XX ||||| : : : : |||||
```

Db 2 GGGGUGGUCUCUGGAG 19
 RESULT 1547
 ID ADF31815 standard; RNA; 19 BP.
 AC ADF31815;
 XX
 XX
 DT 12-FEB-2004 (first entry)
 XX
 DE Human IGF-1R siRNA lower strand, SEQ ID NO:480.
 XX
 XX RNA interference; short interfering nucleic acid; siRNA;
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;
 KW drug screening; diagnosis; therapeutic target identification;
 KW pharmacogenomics; gene function analysis; gene mapping; cancer;
 KW proliferative disease; restenosis; polycystic kidney disease;
 KW inflammatory disease; allergic disease; autoimmune disease;
 KW transplant rejection; cytostatic; vasotropic; nephrotropic;
 KW anti-inflammatory; antiallergic; immunosuppressive; human;
 KW insulin-like growth factor I receptor; IGF-1R; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO2003070911-A2.
 XX
 XX 28-AUG-2003.
 XX
 XX 20-FEB-2003; 2003WO-US005044.
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 XX
 XX Mcswiggen J, Beigelman L, Chowrira B;
 XX WPI; 2003-721691/68.
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of the insulin-like growth
 PT factor-1 receptor gene.
 XX
 XX Example 3; SEQ ID NO 480; 147pp; English.
 XX
 XX The invention relates to short interfering nucleic acids (siNA) which
 CC downregulate expression of the human insulin-like growth factor I
 CC receptor (IGF-1R) gene by RNA interference. The siNAs may or may not
 CC comprise ribonucleotides and may be double or single stranded. They
 CC further comprise sense and antisense regions, or alternatively are
 CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
 CC Specifically, the siNAs include short interfering RNA (siRNA), double-
 CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
 CC can be unmodified or chemically modified, can contain
 CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
 CC vector or enzymatically synthesised. The invention also relates to kits
 CC for the in vitro or in vivo delivery of siNA, conjugates and/or complexes
 CC of siNA, and vectors that express siNA. The siNAs are used to modulate
 CC expression of the IGF-1R gene in cells, tissue explants or organisms
 CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the
 CC treatment of a variety of conditions. They may be used for treating
 CC cancer and other proliferative diseases (e.g., restenosis and polycystic
 CC kidney disease), inflammatory and/or allergic diseases, autoimmune
 CC diseases and transplant rejection. The siNAs are also useful for drug
 CC screening, diagnosis, therapeutic target identification and validation,
 CC genetic engineering, pharmacogenomics, studying gene function, and gene

CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
 CC represents the lower strand of a human IGF-1R-targeted double-stranded
 CC siNA.
 XX
 SQ Sequence 19 BP; 4 A; 9 C; 5 G; 0 T; 1 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 1.6e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1816 GGGGTCCTGCTCTGGGAG 1833
 Db 18 GGGGTCGTCCTCTGGGAG 1
 RESULT 1548
 ID ADF41858/c
 XX ADF41858 standard; DNA; 19 BP.
 AC ADF41858;
 XX
 DT 12-FEB-2004 (first entry)
 XX
 DE Bacillus subtilis sigD deletion construct PCR primer SEQ ID NO:186.
 XX
 KW Bacillus; sbo; slr; ybco; csn; spollsa; sigB; phrC; rapA; CsaS; trpA;
 KW trpB; trpC; trpD; trpE; trpF; cdh/kbl; alsD; sigD; prpC; gapB; pckA; fbp;
 KW roca; ycgN; ycgM; rocF; rocD; enhancing expression; PCR primer; ss.
 XX
 OS Synthetic.
 OS Bacillus subtilis.
 XX
 XX WO2003083125-A1.
 XX
 PD 09-OCT-2003.
 XX
 PF 28-MAR-2003; 2003WO-US009585.
 PR 29-MAR-2002; 2002US-0368859P.
 PR 29-MAR-2002; 2002US-0368949P.
 PR 29-APR-2002; 2002US-0376343P.
 XX
 XX (GEMV) GENENCOR INT INC.
 XX
 XX Ferrari E, Harbison C, Rashid MH, Weyler W;
 XX WPI; 2003-876987/81.
 XX
 XX Enhancing expression of a protein of interest from Bacillus by obtaining
 PT an altered Bacillus strain capable of producing a protein of interest and
 PT growing the altered Bacillus strain.
 XX
 XX Example 3; SEQ ID NO 186; 114pp; English.
 XX
 XX The present invention describes a method for enhancing the expression of
 CC a protein of interest from Bacillus. The method comprises: (a) obtaining
 CC an altered Bacillus strain capable of producing a protein of interest,
 CC where the altered Bacillus strain has at least one inactivated
 CC chromosomal gene consisting of sbo, slr, ybco, csn, spollsa, sigB, phrC,
 CC rapA, CsaS, trpA, trpB, trpC, trpD, trpE, trpF, cdh/kbl, alsD, sigD,
 CC prpC, gapB, pckA, fbp, roca, ycgN, ycgM, rocF, and rocD; and (b) growing
 CC the altered Bacillus strain under conditions such that the protein of
 CC interest is expressed by the altered Bacillus strain, where the
 CC expression of the protein of interest is enhanced compared to the
 CC expression of the protein of interest in an unaltered Bacillus host
 CC strain. Also described: (1) an altered Bacillus strain comprising a
 CC chromosomal deletion of one or more genes consisting of sbo, slr, ybco,
 CC csn, spollsa, sigB, phrC, rapA, CsaS, trpA, trpB, trpC, trpD, trpE, trpF,
 CC cdh/kbl, alsD, sigD, prpC, gapB, pckA, fbp, roca, ycgN, ycgM, rocF, and
 CC rocD; (2) a DNA construct comprising the gene; (3) a plasmid comprising
 CC the DNA construct; (4) a host cell comprising the plasmid; (5) a method
 CC for obtaining an altered Bacillus strain with enhanced protease
 CC production; (6) a method for enhancing expression of a protease in an

QY 231 CTGGACGCGCCGAGCG 248
 DB 18 CTGGCCACGCGCCGCG 1

RESULT 1551
 ADG34657
 ID ADG34657 standard; RNA; 19 BP.
 AC ADG34657;
 XX
 XX 26-FEB-2004 (first entry)
 DT
 DE Human TNF siNA oligonucleotide SEQ ID NO:9.
 XX RNA interference; short interfering nucleic acid; siNA;
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;
 KW drug screening; diagnosis; therapeutic target identification;
 KW pharmacogenomics; gene function analysis; gene mapping;
 KW tumour necrosis factor; TNF; human; DNA-RNA hybrid; ss; antibacterial;
 KW immunosuppressive; antirheumatic; antiarthritic; anti-HIV; antipsoriatic;
 KW antinflammatory; septic shock; rheumatoid arthritis; HIV/AIDS;
 KW psoriasis; inflammation; autoimmune disease; target sequence.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX WO2003070897-A2.
 PN
 XX 28-AUG-2003.
 XX
 XX 20-FEB-2003; 2003WO-US004741.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 28-NOV-2002; 2002US-0429359P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX (RIBO-) RIBOZYME PHARM INC.
 XX Mcswiggen J, Beigelman L;
 XX WPI; 2003-697609/66.
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of septic shock or rheumatoid arthritis, downregulates
 PT expression of the tumor necrosis factor gene.
 XX
 XX Example 3; SEQ ID NO 9; 141pp; English.
 XX
 XX The invention relates to short interfering nucleic acids (siNA) which
 CC downregulate expression of the human tumour necrosis factor (TNF) gene by
 CC RNA interference. The siNAs may or may not comprise ribonucleotides and
 CC may be double or single stranded. They further comprise sense and
 CC antisense regions, or alternatively are assembled from a sense
 CC oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs
 CC include short interfering RNA (siRNA), double-stranded RNA, micro-RNA
 CC (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or
 CC chemically modified, can contain deoxyribonucleotides, and can be
 CC chemically synthesised, expressed from a vector or enzymatically
 CC synthesised. The invention also relates to kits for the in vitro or in
 CC vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors
 CC that express siNA. The siNAs are used to modulate expression of the TNF
 CC gene in cells, tissue explants or organisms (e.g., by ex vivo gene
 CC therapy), or in grafts and transplants for the treatment of a variety of
 CC conditions. The TNF siNAs have antibacterial, immunosuppressive,
 CC antirheumatic, antiarthritic, anti-HIV, antipsoriatic and

CC antiinflammatory activities. They may be used for treating septic shock,
 CC rheumatoid arthritis, HIV/AIDS, psoriasis, inflammation and autoimmune
 CC diseases. The siNAs are also useful for drug screening, diagnosis,
 CC therapeutic target identification and validation, genetic engineering,
 CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
 CC single nucleotide polymorphisms). The present sequence represents the
 CC upper strand of a human TNF-targeted double-stranded siNA, which is
 CC identical to the TNF transcript target sequence.
 XX
 SQ Sequence 19 BP; 2 A; 7 C; 9 G; 0 T; 1 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;
 Best Local Similarity 83.3%; Pred. No. 1.6e+03;
 Matches 15; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2943 AGGAGAGCCCGGGGTC 2960
 DB 2 AGGGGGGCCCCAGGGCUC 19
 ||||| ||||| ||||| :
 ||||| ||||| ||||| :

RESULT 1552
 ADG34745/c
 ID ADG34745 standard; RNA; 19 BP.
 XX
 AC ADG34745;
 XX

DT 26-FEB-2004 (first entry)
 XX

DE Human TNF siNA oligonucleotide SEQ ID NO:97.
 XX

KW RNA interference; short interfering nucleic acid; siNA;
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;
 KW drug screening; diagnosis; therapeutic target identification;
 KW pharmacogenomics; gene function analysis; gene mapping;
 KW tumour necrosis factor; TNF; human; DNA-RNA hybrid; ss; antibacterial;
 KW immunosuppressive; antirheumatic; antiarthritic; anti-HIV; antipsoriatic;
 KW antinflammatory; septic shock; rheumatoid arthritis; HIV/AIDS;
 KW psoriasis; inflammation; autoimmune disease.

OS Synthetic.
 OS Homo sapiens.

XX WO2003070897-A2.
 XX

XX 28-AUG-2003.
 XX

XX 20-FEB-2003; 2003WO-US004741.
 XX

XX 20-FEB-2002; 2002US-0358580P.
 PR

XX 11-MAR-2002; 2002US-0363124P.
 PR

XX 06-JUN-2002; 2002US-0386782P.
 PR

XX 29-AUG-2002; 2002US-0406784P.
 PR

XX 05-SEP-2002; 2002US-0408378P.
 PR

XX 09-SEP-2002; 2002US-0409293P.
 PR

XX 28-NOV-2002; 2002US-0429359P.
 PR

XX 15-JAN-2003; 2003US-0440129P.
 XX

XX (RIBO-) RIBOZYME PHARM INC.
 PA

XX Mcswiggen J, Beigelman L;
 PI

XX WPI; 2003-697609/66.
 XX

XX
 DR

XX
 XX

XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of septic shock or rheumatoid arthritis, downregulates
 PT expression of the tumor necrosis factor gene.

XX
 PS

XX Example 3; SEQ ID NO 97; 141pp; English.
 XX

XX The invention relates to short interfering nucleic acids (siNA) which
 CC downregulate expression of the human tumour necrosis factor (TNF) gene by
 CC RNA interference. The siNAs may or may not comprise ribonucleotides and

| | | | |
|--|--|----|--|
| CC | may be double or single stranded. They further comprise sense and | PA | (MCSW/) MCSWIGGEN J A. |
| CC | antisense regions, or alternatively are assembled from a sense | PA | (BEIG/) BEIGELMAN L. |
| CC | oligonucleotide and an antisense oligonucleotide. Specifically, the siRNAs | XX | |
| CC | include short interfering RNA (siRNA), double-stranded RNA, micro-RNA | PI | Morrissey D, Mcswiggen JA, Beigelman L; |
| CC | (miRNA) and short hairpin RNA (shRNA). The siRNAs can be unmodified or | XX | |
| CC | chemically modified, can contain deoxyribonucleotides, and can be | DR | WPI; 2003-901032/82. |
| CC | chemically synthesised, expressed from a vector or enzymatically | XX | |
| CC | synthesised. The invention also relates to kits for the in vitro or in | PT | New short interfering nucleic acid molecules which down-regulates |
| CC | vivo delivery of siRNA; conjugates and/or complexes of siRNA; and vectors | PT | expression of a hepatitis B virus (HBV) or which inhibits HBV |
| CC | that express siRNA. The siRNAs are used to modulate expression of the TNF | PT | replication, useful for treating human HBV infections or for |
| CC | gene in cells, tissue explants or organisms (e.g., by ex vivo gene | PT | characterizing gene function. |
| CC | therapy), or in grafts and transplants for the treatment of a variety of | XX | |
| CC | conditions. The TNF siRNAs have antibacterial, immunosuppressive, | PS | Claim 11; Page 48; 72pp; English. |
| CC | anti-rheumatic, antiarthritic, anti-HIV, antipsoriatic and | XX | |
| CC | anti-inflammatory activities. They may be used for treating septic shock, | CC | The invention relates to a short interfering nucleic acid (siRNA) molecule |
| CC | CC rheumatoid arthritis, HIV/AIDS, psoriasis, inflammation and autoimmune | CC | that down-regulates expression of a hepatitis B virus (HBV) gene by RNA |
| CC | diseases. The siRNAs are also useful for drug screening, diagnosis, | CC | interference or that inhibits HBV replication. Also disclosed are the |
| CC | therapeutic target identification and validation, genetic engineering, | CC | following: (i) a method of modulating the expression of a HBV gene in a |
| CC | pharmacogenomics, studying gene function, and gene mapping (e.g., of | CC | tissue explant; (ii) a method of generating a library of siRNA constructs |
| CC | single nucleotide polymorphisms). The present sequence represents the | CC | having predetermined complexity; (iii) a cell containing one or more siRNA |
| CC | lower strand of a human TNF-targeted double-stranded siRNA. | CC | molecules; (iv) a kit containing a siRNA molecule which can be used to |
| XX | | CC | modulate the expression of a HBV target gene in a cell, tissue or |
| SQ | Sequence 19 BP; 1 A; 9 C; 7 G; 0 T; 2 U; 0 Other; | CC | organism; and (v) a method for synthesising a siRNA molecule. The siRNA |
| | | CC | molecule is adapted for use to treat HBV infection, and comprises a sense |
| | | CC | and an antisense region, where the antisense region comprises sequence |
| | | CC | complementary to an RNA sequence encoding HBV and the sense region |
| | | CC | comprises sequence complementary to the antisense region. The siRNA |
| | | CC | molecule is assembled from 2 nucleic acid fragments, where one fragment |
| | | CC | comprises the sense region and the second fragment comprises the |
| | | CC | antisense region of the siRNA molecule, where sense region and the |
| | | CC | antisense region comprise separate oligonucleotides, and are covalently |
| | | CC | connected via a linker molecule. The linker molecule is a polynucleotide |
| | | CC | linker or a non-nucleotide linker. The sense region comprises a 3'- |
| | | CC | terminal overhang and the antisense region comprises a 3'-terminal |
| | | CC | overhang. The 3'-terminal overhangs each comprise about 2 nucleotides. |
| | | CC | The antisense region 3'-terminal overhang is complementary to RNA |
| | | CC | encoding HBV. The siRNA is useful for treating human hepatitis B virus |
| | | CC | infections, and for characterising pathways of gene function, e.g. to |
| | | CC | inhibit activity of target genes in a pathway to determine the function |
| | | CC | of uncharacterised genes in gene function analysis. The siRNA molecules |
| | | CC | may also be used in clinical, industrial, environmental, agricultural |
| | | CC | and/or research settings. The present sequence represents 1 of 1504 HBV |
| | | CC | siRNA molecules of the invention. |
| | | XX | |
| | | SQ | Sequence 19 BP; 8 A; 2 C; 8 G; 0 T; 1 U; 0 Other; |
| | | | |
| | | | Query Match 0.4%; Score 14.8; DB 1; Length 19; |
| | | | Best Local Similarity 88.9%; Pred. No. 1.6e+03; |
| | | | Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0; |
| | | | |
| QY | 2943 AGGAGGCCCCAGGGCTC 2960 | QY | 925 TTCCTGTTTCATCCTGCTG 942 |
| Db | 18 AGGGGGGGCCCCAGGGCTC 1 | Db | 19 TTCCTGTTTCATCCTGCTG 2 |
| | | | |
| RESULT 1553 | | | |
| ADM00745/C | | | |
| ID ADM00745 standard; RNA; 19 BP. | | | |
| XX | | | |
| AC ADM00745; | | | |
| XX | | | |
| DT 20-MAY-2004 (first entry) | | | |
| DE Hepatitis B virus short interfering nucleic acid (siRNA) #1161. | | | |
| XX | | | |
| KW Virucide; Hepatotropic; Gene therapy; ss; short interfering nucleic acid; | | | |
| KW siRNA; hepatitis B virus; HBV; RNA interference. | | | |
| XX | | | |
| OS Hepatitis B virus. | | | |
| XX | | | |
| PN US2003206887-A1. | | | |
| XX | | | |
| PD 06-NOV-2003. | | | |
| XX | | | |
| PF 16-SEP-2002; 2002US-00244647. | | | |
| XX | | | |
| PR 14-MAY-1992; 92US-00882712. | | | |
| PR 07-FEB-1994; 94US-00193627. | | | |
| PR 08-NOV-1999; 99US-00436430. | | | |
| PR 20-MAR-2000; 2000US-00531025. | | | |
| PR 09-AUG-2000; 2000US-00636385. | | | |
| PR 24-OCT-2000; 2000US-00696347. | | | |
| PR 08-JUN-2001; 2001US-00877478. | | | |
| PR 08-JUN-2001; 2001US-0296876P. | | | |
| PR 24-OCT-2001; 2001US-0335059P. | | | |
| PR 05-DEC-2001; 2001US-0337055P. | | | |
| PR 20-FEB-2002; 2002US-0358800P. | | | |
| PR 11-MAR-2002; 2002US-0363124P. | | | |
| PR 26-MAR-2002; 2002MO-US009187. | | | |
| PR 06-JUN-2002; 2002US-0386782P. | | | |
| PR 29-AUG-2002; 2002US-0406784P. | | | |
| PR 05-SEP-2002; 2002US-0408378P. | | | |
| PR 09-SEP-2002; 2002US-0409293P. | | | |
| XX | | | |
| PA (MORR/) MORRISSEY D. | | | |

| | |
|--|--|
| PA | (MCSW/) MCSWIGGEN J A. |
| PA | (BEIG/) BEIGELMAN L. |
| XX | |
| PI | Morrissey D, Mcswiggen JA, Beigelman L; |
| XX | |
| DR | WPI; 2003-901032/82. |
| XX | |
| PT | New short interfering nucleic acid molecules which down-regulates |
| PT | expression of a hepatitis B virus (HBV) or which inhibits HBV |
| PT | replication, useful for treating human HBV infections or for |
| PT | characterizing gene function. |
| XX | |
| PS | Claim 11; Page 48; 72pp; English. |
| XX | |
| CC | The invention relates to a short interfering nucleic acid (siRNA) molecule |
| CC | that down-regulates expression of a hepatitis B virus (HBV) gene by RNA |
| CC | interference or that inhibits HBV replication. Also disclosed are the |
| CC | following: (i) a method of modulating the expression of a HBV gene in a |
| CC | tissue explant; (ii) a method of generating a library of siRNA constructs |
| CC | having predetermined complexity; (iii) a cell containing one or more siRNA |
| CC | molecules; (iv) a kit containing a siRNA molecule which can be used to |
| CC | modulate the expression of a HBV target gene in a cell, tissue or |
| CC | organism; and (v) a method for synthesising a siRNA molecule. The siRNA |
| CC | molecule is adapted for use to treat HBV infection, and comprises a sense |
| CC | and an antisense region, where the antisense region comprises sequence |
| CC | complementary to an RNA sequence encoding HBV and the sense region |
| CC | comprises sequence complementary to the antisense region. The siRNA |
| CC | molecule is assembled from 2 nucleic acid fragments, where one fragment |
| CC | comprises the sense region and the second fragment comprises the |
| CC | antisense region of the siRNA molecule, where sense region and the |
| CC | antisense region comprise separate oligonucleotides, and are covalently |
| CC | connected via a linker molecule. The linker molecule is a polynucleotide |
| CC | linker or a non-nucleotide linker. The sense region comprises a 3'- |
| CC | terminal overhang and the antisense region comprises a 3'-terminal |
| CC | overhang. The 3'-terminal overhangs each comprise about 2 nucleotides. |
| CC | The antisense region 3'-terminal overhang is complementary to RNA |
| CC | encoding HBV. The siRNA is useful for treating human hepatitis B virus |
| CC | infections, and for characterising pathways of gene function, e.g. to |
| CC | inhibit activity of target genes in a pathway to determine the function |
| CC | of uncharacterised genes in gene function analysis. The siRNA molecules |
| CC | may also be used in clinical, industrial, environmental, agricultural |
| CC | and/or research settings. The present sequence represents 1 of 1504 HBV |
| CC | siRNA molecules of the invention. |
| XX | |
| SQ | Sequence 19 BP; 8 A; 2 C; 8 G; 0 T; 1 U; 0 Other; |
| | |
| | Query Match 0.4%; Score 14.8; DB 1; Length 19; |
| | Best Local Similarity 88.9%; Pred. No. 1.6e+03; |
| | Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0; |
| | |
| QY | 925 TTCCTGTTTCATCCTGCTG 942 |
| Db | 19 TTCCTGTTTCATCCTGCTG 2 |
| | |
| RESULT 1554 | |
| ADM00099 | |
| ID ADM00099 standard; RNA; 19 BP. | |
| XX | |
| AC ADM00099; | |
| XX | |
| DT 20-MAY-2004 (first entry) | |
| DE Hepatitis B virus short interfering nucleic acid (siRNA) #515. | |
| XX | |
| KW Virucide; Hepatotropic; Gene therapy; ss; short interfering nucleic acid; | |
| KW siRNA; hepatitis B virus; HBV; RNA interference. | |
| XX | |
| OS Hepatitis B virus. | |
| XX | |
| PN US2003206887-A1. | |
| XX | |
| PD 06-NOV-2003. | |

Db 19 GACGTGTGTCCTTCGGG 2

RESULT 1561

ABD24824

ID ABD24824 standard; DNA; 19 BP.

XX

AC ABD24824;

XX

DT 29-JUL-2004 (first entry)

XX

DE AI092623-derived oligonucleotide SEQ ID 3836.

XX

KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;

KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;

KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;

KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

KW pulmonary transplantation rejection; ss; primer.

XX

OS Homo sapiens.

XX

PN WO200285309-A2.

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013143.

XX

PR 24-APR-2001; 2001US-0286036P.

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX

WPI; 2003-093058/08.

XX

PT Pharmaceutical composition for treating asthma, has antisense

PT oligonucleotide containing less percentage of adenosine, targeted to

PT nucleic acids associated with lung airway or lung dysfunction, and

PT bronchodilating agent.

XX

PS Claim 15; SEQ ID NO 3836; 763pp; English.

XX

CC This invention describes a novel composition (a) a first active agent,

CC comprising oligonucleotides, effective for alleviating

CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The

CC oligonucleotides are derived from a gene encoding or regulating

CC expression of a target polypeptide associated with lung airway or lung

CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery

CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has antiallergic, antiinflammatory, antiasthmatic,

CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered

CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The

CC pulmonary obstruction, and/or bronchoconstriction and/or lung

CC inflammation, allergies and/or surfactant hypoproduction are associated

CC with a disease or condition such as pulmonary vasoconstriction,

CC inflammation, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary

CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to

CC thymidines present in the target RNA serves to prevent the breakdown of

CC the oligonucleotides into products that free adenosine into the system

CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to

CC prevent any unwanted effects due to it

XX

SEQ Sequence 19 BP; 3 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;

Best Local Similarity 88.9%; Pred. No. 1.6e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2979 GACCAAGGCTTTCTG 2996

Db 1 GACCAAGGCTTTCTG 18

RESULT 1562

ADQ27126

ID ADQ27126 standard; DNA; 19 BP.

XX

AC ADQ27126;

XX

DT 26-AUG-2004 (first entry)

XX

DE RNA interference target sequence #34.

XX

KW ss; detection; RNA interference; siRNA; gene silencing; gene expression;

KW cytotoxicity.

XX

OS Homo sapiens.

XX

PN WO2004048566-A1.

PD 10-JUN-2004.

XX

PF 21-NOV-2003; 2003WO-JP014893.

XX

PR 22-NOV-2002; 2002JP-00340053.

XX

PA (NATO/) NATORI Y.

PA (SAIG/) SAIGO K.

PA (TEIK/) TEI K.

PA (NAIT/) NAITO Y.

XX

PI Saigo K, Tei K, Naito Y;

XX

WPI; 2004-487423/46.

XX

CC Detecting sequence of RNA interference useful for synthesizing siRNA, by

CC detecting regions in sequence fulfilling specific criteria such as base

CC at 3' terminal is adenine, thymine or uracil, base at 5' terminal is

CC guanine or cytosine.

XX

PS Disclosure; SEQ ID NO 48; 325pp; Japanese.

XX

CC The invention relates to a method of detecting the base sequence for RNA

CC interference by detecting the regions in the DNA sequence fulfilling the

CC following requirements such as: (i) the base at 3' terminal is adenine,

CC thymine or uracil; (ii) the base at 5' terminal is guanine or cytosine;

CC (iii) the seven base sequence at 3' terminal is rich in adenine, thymine

CC and uracil, and; (iv) there are bases in a such a number that it causes

CC RNA interference without showing cytotoxicity. The method is used for

CC designing and synthesizing siRNA causing RNA interference. This sequence

CC corresponds to an RNA interference target sequence of the invention.

XX

SEQ Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 19;

Best Local Similarity 88.9%; Pred. No. 1.6e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 577 GGCACGACGTGGAGTTC 594

Db 1 GGTAGCAACGTGGAGTTC 18

RESULT 1563
ADQ27128
ID ADQ27128 standard; DNA; 19 BP.
XX
AC ADQ27128;
XX
DT 26-AUG-2004 (first entry)
XX
DE RNA interference target sequence #36.
XX
KW ss; detection; RNA interference; siRNA; gene silencing; gene expression;
KW cytotoxicity.
XX
OS Homo sapiens.
XX
PN WO2004048566-A1.
XX
PD 10-JUN-2004.
XX
PF 21-NOV-2003; 2003WO-JP014893.
XX
PR 22-NOV-2002; 2002JP-00340053.
XX
PA (NATO/) NATORI Y.
PA (SAIG/) SAIGO K.
PA (TEIK/) TEI K.
PA (NAIT/) NAITO Y.
XX
PI Saigo K, Tei K, Naito Y;
XX
DR WPI; 2004-487423/46.
XX
PT Detecting sequence of RNA interference useful for synthesizing siRNA, by
PT detecting regions in sequence fulfilling specific criteria such as base
PT at 3' terminal is adenine, thymine or uracil, base at 5' terminal is
PT guanine or cytosine.
XX
PS Disclosure; SEQ ID NO 50; 325pp; Japanese.
XX
CC The invention relates to a method of detecting the base sequence for RNA
CC interference by detecting the regions in the DNA sequence fulfilling the
CC following requirements such as: (i) the base at 3' terminal is adenine,
CC thymine or uracil; (ii) the base at 5' terminal is guanine or cytosine;
CC (iii) the seven base sequence at 3' terminal is rich in adenine, thymine
CC and uracil, and; (iv) there are bases in a such a number that it causes
CC RNA interference without showing cytotoxicity. The method is used for
CC designing and synthesizing siRNA causing RNA interference. This sequence
CC corresponds to an RNA interference target sequence of the invention.
XX
SQ Sequence 19 BP; 6 A; 1 C; 8 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 651 GGTGAATGGCAGCAAGT 668
|||||
Db 1 GGTGAATGGCAGCAAGT 18
XX
RESULT 1564
ADP48862
ID ADP48862 standard; DNA; 19 BP.
XX
AC ADP48862;
XX
DT 09-SEP-2004 (first entry)
XX
DE Mouse Myo1c targeted short inhibitory RNA (siRNA) target DNA SeqID102.
KW short inhibitory RNA; siRNA; adipocyte; cell membrane; electroporating;

KW permeabilised cell membrane; antidiabetic; anorectic; gene therapy;
KW type II diabetes; insulin resistance; obesity; Myo1c; db; mouse; murine.
OS Mus musculus.
PN WO2004053103-A2.
XX
PD 24-JUN-2004.
XX
PF 11-DEC-2003; 2003WO-US039774.
XX
PR 11-DEC-2002; 2002US-0432427P.
XX
PA (UYMA-) UNIV MASSACHUSETTS.
XX
PI Czech MP, Zhou Q, Jiang Z;
XX
DR WPI; 2004-468860/44.
XX
PT Introducing a nucleic acid into an adipocyte, useful for treating type II
PT diabetes, obesity or insulin resistance, comprises contacting an
PT adipocyte having a cell membrane with a nucleic acid molecule, thus
PT forming a mixture.
XX
PS Disclosure; SEQ ID NO 102; 91pp; English.
XX
CC This invention relates to a novel method of introducing a nucleic acid
CC into an adipocyte which comprises contacting an adipocyte having a cell
CC membrane with a nucleic acid molecule, thus forming a mixture and
CC electroporating the mixture under conditions such that the cell membrane
CC becomes permeabilised, such that the nucleic acid is introduced into the
CC adipocyte. The invention may be useful for the production of compounds
CC with an antidiabetic or anorectic activity whilst the disclosed sequences
CC may be useful for gene therapy. The methods are useful for treating type
CC II diabetes, insulin resistance or obesity. The present sequence is that
CC of a region of a gene which may be targeted by short inhibitory RNA
CC (siRNA) used with the method of the invention.
XX
SQ Sequence 19 BP; 4 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.4%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.6e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 3286 CAGGAGAAATTAGATTCT 3303
|||||
Db 1 CAGGAGAAATTAGATTCT 18
XX
RESULT 1565
AAT89883
ID AAT89883 standard; DNA; 20 BP.
XX
AC AAT89883;
XX
DT 02-MAR-1998 (first entry)
XX
DE Oligonucleotide 20-mer primer for ribonucleotide tailing.
XX
KW Ribonucleotide tailing; sequencing; amplification; primer;
KW terminal transferase; polymerase chain reaction; ss.
OS Synthetic.
XX
PN DE19601385-A1.
XX
PD 17-JUL-1997.
XX
PF 16-JAN-1996; 96DE-01001385.
XX
PR 16-JAN-1996; 96DE-01001385.
XX
PA (MUEL/) MUELLER M W.

XX Mueller MW;
 PI WPI; 1997-365083/34.
 DR Nucleic acid amplification after 3' tailing - by reaction with
 XX ribonucleotide in presence of terminal transferase.
 PT Disclosure; Col 11; 12pp; German.
 XX This 20-mer oligonucleotide primer is used in a novel method of
 CC amplifying a nucleic acid molecule involving ribonucleotide tailing of
 CC single stranded DNA in the presence of terminal transferase. This method
 CC can be used for sequencing RNA, especially the 5'-end and involves a 3'
 CC tail of 2 to 4 ribonucleotides being attached onto the target sequence
 CC with high efficiency. The first step in cloning and sequencing the
 CC unknown 5'-end of a specific mRNA molecule involves the synthesis of
 CC single stranded cDNA using a primer specific for a known region in the 3'
 CC region of the mRNA. A tail of two rGTP's is attached to the mRNA using
 CC terminal transferase and a specific double stranded DNA adapter is
 CC attached via a complementary 3' overhang (i.e. CC) in the presence of T4
 CC DNA ligase. PCR amplification using a 5'-biotinylated adapter-specific
 CC primer and a cDNA-specific nested primer including a desired restriction
 CC site produces a unique PCR product suitable for direct solid-phase
 CC sequencing or dideoxy sequencing after a cloning step using restriction
 CC sites on the adapter or on the cDNA primer
 XX Sequence 20 BP; 8 A; 0 C; 3 G; 8 T; 0 U; 1 Other;
 SQ Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2815 GTATATGCGTATATATACA 2832
 DB 2 GTATATGTTATATATAA 19
 RESULT 1566
 AAQ53223/c
 ID AAQ53223 standard; DNA; 20 BP.
 AC AAQ53223;
 XX 25-MAR-2003 (revised)
 DT 17-JUN-1994 (first entry)
 XX Sequence of sense primer HNP63s used to determine tissue expression of
 DE defensin genes.
 XX Gastrointestinal defensin peptide; GID; pharmaceutical; Paneth cell;
 KW antimicrobial; anti-inflammatory; diagnosis; probe; contact disinfectant;
 KW PCR primer; ss.
 XX Synthetic.
 OS WO9324513-A1.
 PN 09-DEC-1993.
 XX 18-MAY-1993; 93WO-US004740.
 PF 22-MAY-1992; 92US-00889232.
 PR (CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
 XX Bevins CL, Jones DE;
 XX WPI; 1993-405719/50.
 DR Gastrointestinal defensin peptide(s) - useful as antimicrobial and anti-
 PT inflammatory agents and for detecting gastrointestinal disorders.
 XX

PS Claim 50; Page 72; 97pp; English.
 XX PCR amplification was conducted to determine tissue expression of
 CC defensin genes. For amplification of defensin 5 related sequences an
 CC upstream sense primer was chosen from one defensin-related open reading
 CC frame (HNP63S) and the downstream antisense primer was chosen from the
 CC other (HSI261a). These primers were chosen so the amplification product
 CC would include an intron when the template was genomic DNA, a possible
 CC contaminant in a pool of cDNA. Control amplifications from the cDNA
 CC templates used primer pairs (HTUBs and HTUBa) from the alpha-tubulin
 CC sequence. (Updated on 25-MAR-2003 to correct PN field.)
 XX Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 655 AATGGCAGCAGAGTGGGC 672
 DB 20 AATGGCAGCAGAGTGGC 3
 RESULT 1567
 AAQ93404/c
 ID AAQ93404 standard; DNA; 20 BP.
 XX AAQ93404;
 AC AAQ93404;
 XX 20-DEC-1995 (first entry)
 DT Equine clone 595-1 5' proximal antisense strand SNP detection oligo.
 XX Invariant; proximal; distal; single nucleotide polymorphism; SNP; equine;
 KW human; primer; template-dependent extension; identification;
 KW polymorphic allele; horse; identity; genotype; ancestry; parentage;
 KW prediposition; genetic disease; linkage; ss.
 XX Equus caballus.
 OS WO9512607-A1.
 PN 11-MAY-1995.
 XX 02-NOV-1994; 94WO-US012632.
 PF 03-NOV-1993; 93US-00145145.
 PR 23-MAR-1994; 94US-00216538.
 XX (MOLE-) MOLECULAR TOOL INC.
 PA Goelet P, Knapp MR;
 PI WPI; 1995-193812/25.
 DR Nucleic acid mols. for identifying single nucleotide polymorphism sites -
 XX and related methods, useful for genotyping human or horse genome(s) for
 PT analysis of pre-disposition to genetic traits, etc.
 XX Claim 6; Page 49; 129pp; English.
 XX The sequences given in AAQ93370-441 represent oligomers which are capable
 CC of hybridizing to an invariant proximal or distal sequence of a single
 CC nucleotide polymorphism (SNP) site in equine DNA. These oligomers act as
 CC primers, where template-dependent extension of the primer by a single
 CC nucleotide base can be used to identify the polymorphic allele. These
 CC sequences may be used to in the analysis of 18 SNPs from 5 different
 CC horses. The analysis of SNPs is useful in determining identity, ancestry
 CC or prediposition to genetic diseases. The method may also be used to
 CC determine the linkage between two genetic traits
 XX Sequence 20 BP; 11 A; 7 C; 1 G; 1 T; 0 U; 0 Other;
 SQ

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Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2335 GTGTGTGTGTGTGTGC 2352
Db 19 GTGTGTGTGTGTGTGC 2

RESULT 1568
AAQ93403
ID AAQ93403 standard; DNA; 20 BP.
XX
AC AAQ93403;
XX
DT 20-DEC-1995 (first entry)
XX
DE Equine clone 595-1 3' distal sense strand SNP detection oligo.
XX
KW Invariant; proximal; distal; single nucleotide polymorphism; SNP; equine;
KW human; primer; template-dependent extension; identification;
KW polymorphic allele; horse; identity; genotype; ancestry; parentage;
KW prediposition; genetic disease; linkage; ss.
XX
OS Equus caballus.
XX
PN WO9512607-Al.
XX
PD 11-MAY-1995.
XX
PF 02-NOV-1994; 94WO-US012632.
XX
PR 03-NOV-1993; 93US-00145145.
PR 23-MAR-1994; 94US-00216538.
XX
PA (MOLE-) MOLECULAR TOOL INC.
XX
PI Goelet P, Knapp MR;
XX
PN WPI; 1995-193812/25.
XX
PT Nucleic acid mols. for identifying single nucleotide polymorphism sites -
PT and related methods, useful for genotyping human or horse genome(s) for
PT analysis of pre-disposition to genetic traits, etc.
XX
PS Claim 6; Page 49; 129pp; English.
XX
CC The sequences given in AAQ93370-441 represent oligomers which are capable
CC of hybridizing to an invariant proximal or distal sequence of a single
CC nucleotide polymorphism (SNP) site in equine DNA. These oligomers act as
CC primers, where template-dependent extension of the primer by a single
CC nucleotide base can be used to identify the polymorphic allele. These
CC sequences may be used to in the analysis of 18 SNP's from 5 different
CC horses. The analysis of SNP's is useful in determining identity, ancestry
CC or prediposition to genetic diseases. The method may also be used to
CC determine the linkage between two genetic traits
XX
SQ Sequence 20 BP; 1 A; 1 C; 7 G; 11 T; 0 U; 0 Other;

Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2335 ATATACATATATATATAT 2843
Db 18 ATATCAATATATATATAT 1

RESULT 1570
AAQ93402
ID AAQ93402 standard; DNA; 20 BP.
XX
AC AAQ93402;
XX
DT 20-DEC-1995 (first entry)
XX
DE Equine clone 595-1 5' proximal sense strand SNP detection oligo.
XX
KW Invariant; proximal; distal; single nucleotide polymorphism; SNP; equine;
KW human; primer; template-dependent extension; identification;
KW polymorphic allele; horse; identity; genotype; ancestry; parentage;
KW prediposition; genetic disease; linkage; ss.
XX
OS Equus caballus.
XX
PN WO9512607-Al.
XX

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PD 11-MAY-1995.
XX
XX PS
XX 02-NOV-1994; 94WO-US012632.
XX
XX 03-NOV-1993; 93US-00145145.
PR 23-MAR-1994; 94US-00216538.
XX
XX (MOLE-) MOLECULAR TOOL INC.
XX
XX Goelet P, Knapp MR;
PI WPI; 1995-193812/25.
XX
XX Nucleic acid mols. for identifying single nucleotide polymorphism sites -
PT and related methods, useful for genotyping human or horse genome(s) for
PT analysis of pre-disposition to genetic traits, etc.
XX
XX Claim 6; Page 49; 129pp; English.
XX
XX The sequences given in AAQ93370-441 represent oligomers which are capable
CC of hybridising to an invariant proximal or distal sequence of a single
CC nucleotide polymorphism (SNP) site in equine DNA. These oligomers act as
CC primers, where template-dependent extension of the primer by a single
CC nucleotide base can be used to identify the polymorphic allele. These
CC sequences may be used to in the analysis of 18 SNP's from 5 different
CC horses. The analysis of SNP's is useful in determining identity, ancestry
CC or predisposition to genetic diseases. The method may also be used to
CC determine the linkage between two genetic traits
XX
XX Sequence 20 BP; 10 A; 1 C; 1 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2826 ATATCATATATATATAT 2843
Db 3 ATATCAATATATATAT 20
RESULT 1571
AAT30406
ID AAT30406 standard; DNA; 20 BP.
XX
XX AC AAT30406;
XX
XX 28-JAN-1997 (first entry)
XX
XX Compound simple sequence repeat primer (AT)3.5(GT)6.5.
XX
XX Detection; polymorphism; perfect compound simple sequence repeat;
XX adaptor directed primer; genome; genetic; fingerprinting;
XX amplified fragment length polymorphism assay; microsatellite region;
XX genetic trait marking; germplasm comparisons; compound; ss.
XX
XX Synthetic.
XX
XX WO9617082-A2.
XX
XX 06-JUN-1996.
XX
XX 21-NOV-1995; 95WO-US015150.
XX
XX 28-NOV-1994; 94US-00346456.
XX
XX (DUPO ) DU PONT DE NEMOURS & CO E I.
XX
XX Morgante M, Vogel JM;
PI WPI; 1996-277795/28.
XX
XX Modified amplified fragment length polymorphism assay - for detection of
XX polymorphism esp. in micro:satellite regions.
XX
XX Disclosure; Fig 1c; 173pp; English.
XX
XX Detecting polymorphisms between 2 nucleic acid samples, esp. in
XX microsatellite regions, comprises digesting the nucleic acid to generate
XX fragments, ligating adaptor segments to their ends, amplifying them using
XX primer directed amplification and comparing the prods. to detect
XX differences. The primers used in the amplification comprise a primer
XX consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
XX directed primer, comprising a sequence complementary to an adaptor
XX segment. The present sequence is an example of a compound SSR primer. The
XX method represents a modified amplified fragment length polymorphism
XX assay, which is partic. useful for genome fingerprinting, i.e. for
XX genetic trait marking and germplasm comparisons
XX
XX Sequence 20 BP; 3 A; 0 C; 7 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2316 TCTGTGTGTGTGTGTGTG 2333
Db 3 TATATGTGTGTGTGTGTG 20
RESULT 1572
AAT30420
ID AAT30420 standard; DNA; 20 BP.
XX
XX AC AAT30420;
XX
XX 28-JAN-1997 (first entry)
XX
XX Compound simple sequence repeat primer (AT)2.5(GT)6.5.
XX
XX Detection; polymorphism; perfect compound simple sequence repeat;
XX adaptor directed primer; genome; genetic; fingerprinting;
XX amplified fragment length polymorphism assay; microsatellite region;
XX genetic trait marking; germplasm comparisons; compound; ss.
XX
XX Synthetic.
XX
XX WO9617082-A2.
XX
XX 06-JUN-1996.
XX
XX 21-NOV-1995; 95WO-US015150.
XX
XX 28-NOV-1994; 94US-00346456.
XX
XX (DUPO ) DU PONT DE NEMOURS & CO E I.
XX
XX Morgante M, Vogel JM;
PI WPI; 1996-277795/28.
XX
XX Modified amplified fragment length polymorphism assay - for detection of
XX polymorphism esp. in micro:satellite regions.
XX
XX Disclosure; Fig 1c; 173pp; English.
XX
XX Detecting polymorphisms between 2 nucleic acid samples, esp. in
XX microsatellite regions, comprises digesting the nucleic acid to generate
XX fragments, ligating adaptor segments to their ends, amplifying them using
XX primer directed amplification and comparing the prods. to detect
XX differences. The primers used in the amplification comprise a primer
XX consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
XX directed primer, comprising a sequence complementary to an adaptor
XX segment. The present sequence is an example of a compound SSR primer. The
XX method represents a modified amplified fragment length polymorphism
XX assay, which is partic. useful for genome fingerprinting, i.e. for
XX genetic trait marking and germplasm comparisons

```

Qy 844 CTGCCAGCCGAGGAG 861

XX AAV03702;
 XX 15-APR-1998 (first entry)
 XX Primer SHF-15 for H chain of Fas specific antibody coding sequence.
 DE Fas; antibody; human; immunoglobulin; variable region; rheumatism;
 KW autoimmune disease; rheumatoid arthritis; therapy; CDR; heavy chain;
 KW complementarity determining region; PCR primer; amplify; ss.
 XX Synthetic.
 OS Mus sp.
 XX EP799891-A1.
 XX 08-OCT-1997.
 XX 27-MAR-1997; 97EP-00302415.
 XX 01-APR-1996; 96JP-00078570.
 XX (SANY) SANKYO CO LTD.
 XX Serizawa N, Ichikawa K, Nakahara K, Yonehara S;
 XX WPI; 1997-482673/45.
 XX Anti-Fas recombinant antibodies - useful for treating auto-immune
 PT diseases, especially rheumatoid arthritis.
 XX Example 4; Page 15; 72pp; English.
 XX This sequence represents a primer for the coding sequence for the protein
 CC of the invention. The protein of the invention is a recombinant protein
 CC (A), that comprises at least one region corresponding to an
 CC immunoglobulin (Ig) variable region which enables the protein to
 CC recognise and specifically bind to an antigen, preferably human Fas, and
 CC has substantially no more immunogenicity in a human patient than a human
 CC antibody. The proteins are useful for treating autoimmune diseases,
 CC especially rheumatism (rheumatoid arthritis). (A) is based on a murine
 CC monoclonal antibody. As the protein lacks the constant region, it has
 CC substantially no more immunogenicity in the human patient than a human
 CC antibody
 XX
 XX Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 604 GTGTACAGTACGACACAG 621
 DB 3 GTGTACTGTGACTACAG 20
 RESULT 1576
 AAT59727/C
 ID AAT59727 standard; DNA; 20 BP.
 XX
 XX AAT59727;
 XX 06-OCT-1997 (first entry)
 XX Human raf inhibitor oligonucleotide ON19.
 DE raf; inhibitor; antisense; liposome; cancer; abnormal expression;
 XX anti-hyperproliferative; ss.
 KW
 KW Synthetic.
 OS
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT

FT /*tag= a
 FT /note= "phosphorothioate backbone linkages"
 FT 1..12
 FT /*tag= b
 FT /note= "2' position of the sugar moiety is substituted by
 FT methoxy"
 XX
 XX W09704787-A1.
 XX 13-FEB-1997.
 XX 24-JUL-1996; 96WO-GB001775.
 XX 01-AUG-1995; 95GB-00015743.
 XX 19-SEP-1995; 95GB-00019130.
 XX (CIBA) CIBA GEIGY AG.
 XX Love WG, Phillips JA, Nicklin PL, Hamilton KO;
 XX WPI; 1997-145363/13.
 XX Inhibiting human raf expression, partic. for treating cancer - using an
 PT oligonucleotide targetted to mRNA encoding human raf entrapped in
 PT sterically stabilised liposome(s).
 XX
 XX Claim 16; Page 19; 27pp; English.
 XX
 XX AAT59716-28 are preferred oligonucleotides which are targeted to mRNA
 CC encoding human raf and are capable of inhibiting raf expression.
 CC Compositions containing the oligonucleotides entrapped in sterically
 CC stabilised liposomes are claimed. The compsns. can be used for inhibiting
 CC the expression of human raf. They can be used for the treatment of
 CC mammalian cancer, partic. human cancer e.g. lung, stomach, renal, breast,
 CC laryngeal, pancreatic, colorectal cancer and malignant melanoma. In
 CC particular the compsns. can inhibit abnormal raf expression and retain
 CC anti-hyperproliferative activity after prolonged circulation in the
 CC bloodstream. They facilitate the reduction of accumulation of ONs in non-
 CC target organs and a reduction of acute and chronic side effects during
 CC prolonged treatment. ON18, 19 and 21 are chimeric oligonucleotides with
 CC uniform phosphorothioate backbones, and substituted with methoxy at the
 CC 2' position of the sugar moiety as indicated above. ON19 is targeted to
 CC the 3'UTR of c-raf
 XX
 XX Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 844 CTGCCAGCGGAGGAGGAG 861
 DB 20 CTGCCAGCGGAGGAGGAG 3
 RESULT 1577
 AAT62156/C
 ID AAT62156 standard; DNA; 20 BP.
 XX
 XX AAT62156;
 XX 01-DEC-1997 (first entry)
 XX Human c-raf and dextran sulphate mRNA targetting oligonucleotide ON19.
 DE Cancer; anionic polysaccharide; human; lung cancer; stomach cancer;
 KW renal cancer; breast cancer; laryngeal cancer; pancreatic cancer;
 KW colorectal cancer; malignant melanoma; tumour; ss.
 XX
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 FH misc_feature 1..20
 FT

SQ Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3651 CTTGCTTGCTGCAGGCG 3668
 DB 2 CTTGCATGCTGCAGGTC 19

RESULT 1580
 AAX15068/c
 ID AAX15068 standard; DNA; 20 BP.
 AC AAX15068;
 XX
 DT 20-MAR-2003 (revised)
 DT 16-APR-1999 (first entry)
 XX
 DE c-raf antisense chimeric oligonucleotide of the invention.
 KW Nuclease resistant; ribofuranosyl moiety; 2'-aminoalkoxy; tumour;
 KW 2'-imidazolylalkoxy; modulation; activity; AIDS; atherosclerosis;
 KW phosphorothioate; ss.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /note= "phosphorothioated"
 XX
 PN US5872232-A.
 XX
 PD 16-FEB-1999.
 XX
 PF 06-JUN-1995; 95US-00471973.
 XX
 PR 11-JAN-1990; 90US-00463358.
 PR 13-AUG-1990; 90US-00566977.
 PR 12-AUG-1991; 91WO-US005720.
 PR 05-MAR-1992; 92US-00835932.
 PR 01-JUL-1992; 92US-00854634.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Cook PD, Kawasaki AM;
 XX
 DR WPI; 1999-166721/14.
 XX
 PT New 2'-O-modified oligo-nucleotide(s) - comprising nucleotide(s) comprising a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent, used for hybridisation to RNA or DNA.
 XX
 PS Example 31; Col 50; 48pp; English.
 XX
 CC The present oligonucleotide exemplifies the oligonucleotides of the invention. Oligonucleotides of the invention are nuclease resistant, and comprise covalently-bound nucleosides that individually include a ribose or deoxyribose sugar portion and base portion where the nucleosides are joined together by internucleoside linkages such that the base portion of the nucleosides form a mixed base sequence that is complementary to a RNA base sequence or to a DNA base sequence. At least one of the nucleosides has a modified ribofuranosyl moiety bearing a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent. The nuclease resistant compounds can be used for modulating the activity of DNA or RNA. They can be used for treating organisms having a disease characterised by the undesired production of a protein. Diverse organisms such as bacteria, yeast, protozoa, algae, plant and higher animal forms including warm-blooded animals can be treated in this manner. The compounds can be used for treating e.g. AIDS, atherosclerosis or tumours. They can also be used in diagnostic methods for detecting the presence or absence of abnormal RNA

CC molecules, or abnormal or inappropriate expression of normal RNA molecules in organisms or cells. (Updated on 20-MAR-2003 to correct PR field.)
 CC
 XX
 SQ Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 844 CTGCCAGCGGAGGAG 861
 DB 20 CTGCCAGCGGAGGAG 3

RESULT 1581
 AAX90369/c
 ID AAX90369 standard; DNA; 20 BP.
 XX
 AC AAX90369;
 XX
 DT 24-SEP-1999 (first entry)
 XX
 DE Human p53 gene reverse transcription PCR primer exon 7 antisense.
 XX
 KW Human; p53; reverse transcription; PCR primer; resistance; mutant;
 KW cancer; cyclin D1 protein; chemotherapy; cytotoxic; ss.
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN GB2334577-A.
 XX
 PD 25-AUG-1999.
 XX
 PF 18-FEB-1998; 98GB-00003446.
 XX
 PR 18-FEB-1998; 98GB-00003446.
 XX
 PA (UYLI-) UNIV LIVERPOOL.
 XX
 PI Warenius HM;
 XX
 DR WPI; 1999-422070/36.
 XX
 PT Measuring resistance of p53 mutant cancer cells to cytotoxic agents.
 XX
 PS Example; Page 13; 26pp; English.
 XX
 CC The present invention describes a method for measuring the resistance of p53 mutant cancer cells to the cytotoxic effects of chemotherapeutic agents by testing a sample comprising p53 mutant cells or an extract from p53 mutant cells for the abundance of cyclin protein D1. AAX90360 to AAX90373 represent reverse transcription PCR primers used to amplify the human p53 gene. The method can be used to predict the response of human cancer cells to anticancer therapy agents which can be used to select the most appropriate therapy for patients suffering from cancer. High cyclin D1 levels or high cyclin D1 expression together with p53 mutation is strongly associated with resistance to cis-diaminedichloroplatinum (CDDP) in human cancer cells. The test may be used to detect resistance to other cytotoxic agents such as etoposide and indicate whether radiation may be a viable alternative to CDDP or if other cytotoxic agents would be more suitable, e.g. may suggest that Taxol should be considered as an alternative therapy as it may not be sensitive to a combination of p53 mutation and cyclin D1 protein overexpression
 XX
 SQ Sequence 20 BP; 3 A; 3 C; 10 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2695 CCACTTCCACCCCTGCC 2712

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Db      19  CCACTTGCACCCCTGCAC 2
      ||||| ||||| ||||| ||||| |||||
RESULT 1582
AAZ18098/c
ID  AAZ18098 standard; DNA; 20 BP.
XX  AC  AAZ18098;
XX  XX
DT  11-OCT-1999 (first entry)
XX  DE  PTK 4 gene specific primer.
XX  KW  Genetic proximity; gene expression; cell characterisation; homeobox gene;
XX  KW  genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
XX  KW  kinase gene; protein phosphatase; p450; steroid receptor; cadherin;
XX  KW  primer; ss.
XX  OS  Synthetic.
XX  OS  Homo sapiens.
XX  PN  WO934016-A2.
XX  PD  08-JUL-1999.
XX  PF  28-DEC-1998; 98WO-1L000625.
XX  PR  29-DEC-1997; 97IL-00122793.
XX  PR  16-OCT-1998; 98IL-00126627.
XX  PA  (GENE-) GENENA LTD.
XX  PI  Vider B;
XX  DR  WPI; 1999-419113/35.
XX  DR  P-PSDB; AAY14633.
XX  PT  Identifying and characterizing cells by comparing the pattern of gene
XX  PT  expression in a selected gene family.
XX  PS  Claim 4; Page 42; 102pp; English.
XX  CC  The invention provides a new method for identifying and characterising
XX  CC  cells. The method for determining the genetic proximity of a first cell
XX  CC  and a second cell comprises: (a) obtaining the first cell and the second
XX  CC  cell; (b) determining in the first cell and the second cell the pattern
XX  CC  of expression of genes in a selected gene family; and (c) calculating a
XX  CC  proximity index using a specified formula. The methods can be used for
XX  CC  characterising cells, e.g. for determining the origin of a cell, its
XX  CC  genetic status, whether it carries a genetic defect, or whether it is
XX  CC  transformed. They can be used for detecting a selected genetic defect in
XX  CC  an individual, e.g. a fetus. They can also be used for determining the
XX  CC  effect of a selected treatment on a test cell. They can also be used for
XX  CC  obtaining cells capable of expressing an homeobox related desired
XX  CC  property. The method uses reverse transcriptase polymerase chain reaction
XX  CC  (RT-PCR) for determining the pattern of gene expression in a selected
XX  CC  gene family. Sequences AAZ17803-Z18342 represent primers that can be used
XX  CC  in the RT-PCR reactions to determine the pattern of gene expression. The
XX  CC  gene family can be selected from a set of homeobox genes, kinase genes,
XX  CC  protein phosphatase genes, p450 enzyme genes, steroid receptor
XX  CC  superfamily genes or cadherin superfamily genes
XX  SQ  Sequence 20 BP; 5 A; 9 C; 5 G; 1 T; 0 U; 0 Other;

Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      1801 GACGTCGTGCTCTTGG 1818
      ||||| ||||| ||||| ||||| |||||
Db      18  GACGTGTGGTCTCTGGG 1
      ||||| ||||| ||||| ||||| |||||

RESULT 1584
AAZ18104/c
ID  AAZ18120 standard; DNA; 20 BP.
XX  AC  AAZ18120;
XX  XX
DT  11-OCT-1999 (first entry)
XX  DE  PTK 15 gene specific primer.
XX  KW  Genetic proximity; gene expression; cell characterisation; homeobox gene;
XX  KW  genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
XX  KW  kinase gene; protein phosphatase; p450; steroid receptor; cadherin;
XX  KW  primer; ss.
XX  OS  Synthetic.
XX  OS  Homo sapiens.
XX  PN  WO934016-A2.
XX  PD  08-JUL-1999.
XX  PF  28-DEC-1998; 98WO-1L000625.
XX  PR  29-DEC-1997; 97IL-00122793.
XX  PR  16-OCT-1998; 98IL-00126627.
XX  PA  (GENE-) GENENA LTD.
XX  PI  Vider B;
XX  DR  WPI; 1999-419113/35.
XX  DR  P-PSDB; AAY14655.
XX  PT  Identifying and characterizing cells by comparing the pattern of gene
XX  PT  expression in a selected gene family.
XX  PS  Claim 4; Page 43; 102pp; English.
XX  CC  The invention provides a new method for identifying and characterising
XX  CC  cells. The method for determining the genetic proximity of a first cell
XX  CC  and a second cell comprises: (a) obtaining the first cell and the second
XX  CC  cell; (b) determining in the first cell and the second cell the pattern
XX  CC  of expression of genes in a selected gene family; and (c) calculating a
XX  CC  proximity index using a specified formula. The methods can be used for
XX  CC  characterising cells, e.g. for determining the origin of a cell, its
XX  CC  genetic status, whether it carries a genetic defect, or whether it is
XX  CC  transformed. They can be used for detecting a selected genetic defect in
XX  CC  an individual, e.g. a fetus. They can also be used for determining the
XX  CC  effect of a selected treatment on a test cell. They can also be used for
XX  CC  obtaining cells capable of expressing an homeobox related desired
XX  CC  property. The method uses reverse transcriptase polymerase chain reaction
XX  CC  (RT-PCR) for determining the pattern of gene expression in a selected
XX  CC  gene family. Sequences AAZ17803-Z18342 represent primers that can be used
XX  CC  in the RT-PCR reactions to determine the pattern of gene expression. The
XX  CC  gene family can be selected from a set of homeobox genes, kinase genes,
XX  CC  protein phosphatase genes, p450 enzyme genes, steroid receptor
XX  CC  superfamily genes or cadherin superfamily genes
XX  SQ  Sequence 20 BP; 8 A; 7 C; 3 G; 2 T; 0 U; 0 Other;

Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      1800 TGACGTCGTGCTCTTGG 1817
      ||||| ||||| ||||| ||||| |||||
Db      19  TGATGTGTGCTCTTGG 2
      ||||| ||||| ||||| ||||| |||||

RESULT 1584
AAZ18104/c

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ID AAZ18104 standard; DNA; 20 BP.
 AC AAZ18104;
 XX
 DT 11-OCT-1999 (first entry)
 XX
 DE PTK 7 gene specific primer.
 XX
 KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN W09934016-A2.
 XX
 PD 08-JUL-1999.
 XX
 PF 28-DEC-1998; 98WO-11000625.
 XX
 PR 29-DEC-1997; 97IL-00122793.
 PR 16-OCT-1998; 98IL-00126627.
 XX
 PA (GENE-) GENENEA LTD.
 XX
 XX Vidar B;
 XX
 DR WPI; 1999-419113/35.
 DR P-PSDB; AAY14639.
 XX
 XX Identifying and characterizing cells by comparing the pattern of gene
 PT expression in a selected gene family.
 XX
 PS Claim 4; Page 42; 102pp; English.
 XX
 CC The invention provides a new method for identifying and characterising
 CC cells. The method for determining the genetic proximity of a first cell
 CC and a second cell comprises: (a) obtaining the first cell and the second
 CC cell; (b) determining in the first cell and the second cell the pattern
 CC of expression of genes in a selected gene family; and (c) calculating a
 CC proximity index using a specified formula. The methods can be used for
 CC characterising cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC (RT-PCR) for determining the pattern of gene expression in a selected
 CC gene family. Sequences AAZ17803-218342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes
 XX
 SQ Sequence 20 BP; 8 A; 7 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1800 TGACGTCCTGCTCTTGG 1817
 DB 19 TGATGTGTGCTCTTGG 2
 RESULT 1585
 AAZ11536/C
 ID AAZ11536 standard; DNA; 20 BP.
 XX
 AC AAZ11536;
 XX

XX 05-NOV-1999 (first entry)
 DT
 XX Human c-raf kinase antisense oligo ISIS # 7854.
 DE
 XX Human; raf; diagnosis; abnormal proliferative state; hyperproliferation;
 KW cancer; psoriasis; blood vessel restenosis; c-raf kinase; antisense; ss.
 KW
 XX Synthetic.
 OS Homo sapiens.
 OS
 PN US5952229-A.
 XX
 PD 14-SEP-1999.
 XX
 PF 26-NOV-1996; 96US-00756806.
 XX
 PR 31-MAY-1994; 94US-00250856.
 PR 31-MAY-1995; 95WO-US007111.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Boggis RT, Monia BP;
 XX
 DR WPI; 1999-527018/44.
 XX
 PT Oligonucleotides targeted to human raf mRNA useful for treating and
 PT diagnosing abnormal proliferative states and inhibiting raf expression.
 XX
 PS Claim 1; Col 11; 29pp; English.
 XX
 CC The invention provides antisense oligonucleotides targeted to mRNA
 CC encoding human raf and capable of inhibiting raf expression. The
 CC antisense oligonucleotides are useful for treating and diagnosing
 CC abnormal proliferative states and hyperproliferation (e.g. cancer,
 CC psoriasis, or blood vessel restenosis), and inhibiting raf expression.
 CC Sequences AAZ11511-537 and AAZ11565-573 represent antisense
 CC oligonucleotides for human c-raf kinase
 XX
 SQ Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 844 CTGCCAGCCGAGGAGGAG 861
 DB 20 CTGCCAGCCGAGGAGGAG 3
 RESULT 1586
 AAX05466/C
 ID AAX05466 standard; DNA; 20 BP.
 XX
 AC AAX05466;
 XX
 DT 20-APR-1999 (first entry)
 XX
 DE Chimeric antisense oligo for c-raf gene.
 XX
 KW Nuclease resistant; modified; deoxyfuranosyl moiety; therapy; infection;
 KW AIDS; atherosclerosis; tumour; c-raf; antisense; ss.
 KW
 XX Synthetic.
 OS Homo sapiens.
 OS
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= a
 FT /note= "contains phosphorothioate linkages; optional 2' O
 FT -methyl modification on some base pairs"
 XX
 PN US5859221-A.

```
XX PD 12-JAN-1999.
XX XX
XX PF 06-JUN-1995; 95US-00468037.
XX XX
XX PR 11-JAN-1990; 90US-00463358.
XX PR 13-AUG-1990; 90US-00566977.
XX PR 12-AUG-1991; 91WO-US005720.
XX PR 05-MAR-1992; 92US-00835932.
XX PR 01-JUL-1992; 92US-00854634.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Cook PD, Kawasaki AM;
XX XX
XX DR WPI; 1999-120005/10.
XX XX
XX PT Nuclease resistant oligonucleotide analogues - having nucleosides
XX PT including modified deoxyfuranosyl moiety bearing 2'-substituent to
XX PT increase binding affinity.
XX PS Example 31; Col 51; 49pp; English.
XX XX
XX CC The invention relates to a nuclease resistant compound that hybridizes
XX CC with RNA or DNA. The compound comprises covalently-bound nucleosides that
XX CC individually include a ribose or deoxyribose sugar portion and a base
XX CC portion, where the nucleosides are joined together by internucleoside
XX CC linkages such that the base portion of the nucleosides form a mixed base
XX CC sequence that is complementary to a RNA base sequence or to a DNA base
XX CC sequence; and where at least 1 of the nucleosides includes a modified
XX CC deoxyfuranosyl moiety bearing a 2'-substituent selected from cyano,
XX CC fluoromethyl, thioalkoxy, alkylsulphonyl, alkylsulphonyl, allyloxy and
XX CC alkeneoxy groups. The nuclease resistant oligonucleotides (ONs) can bind
XX CC to and modulate the activity of DNA or RNA and can be used for treating
XX CC organisms having a disease characterised by the undesired production of a
XX CC protein. They can be used in therapeutic or prophylactic treatment in
XX CC organisms such as bacteria, yeast, protozoa, algae, plant and higher
XX CC animal forms including warm-blooded animals. The ONs can also be used for
XX CC treating infections, AIDS, atherosclerosis or tumours. The products can
XX CC be used for detection and diagnosis. The ONs provide enhanced binding to
XX CC targets. Increased binding of 2'-sugar modified sequence-specific ONs
XX CC provides superior potency and specificity compared to phosphorus-modified
XX CC ONs. The present sequence represents a chimeric antisense oligo for c-raf
XX CC gene
XX XX
XX SQ Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. NO. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 844 CTGCCAGCGGAGGAGGAG 861
DB 20 CTGCCAGCGGAGGAGGAG 3
RESULT 1587
AAAX90397/C
ID AAAX90397 standard; DNA; 20 BP.
XX AC
XX AC AAAX90397;
XX DT
XX DT 24-SEP-1999 (first entry)
XX DE Human p53 gene reverse transcription PCR primer exon 7 antisense.
XX XX
XX KW Human; p53; reverse transcription; PCR primer; cancer; cytotoxic;
XX KW signal transduction factor; mutant; cell cycle; apoptosis; chemotherapy;
XX KW ss.
XX OS
XX OS Synthetic.
XX OS Homo sapiens.
XX PN
XX PN GB2334579-A.
XX XX
XX PD 25-AUG-1999.
XX XX
XX PF 03-JUL-1998; 98GB-00014545.
XX PR 18-FEB-1998; 98GB-00003446.
XX PR 18-FEB-1998; 98GB-00003447.
XX PR 05-JUN-1998; 98GB-00012151.
XX XX
XX PA (UYLI-) UNIV LIVERPOOL.
XX PA (THER-) THERYTE LTD.
XX XX
XX PI Warenus HM, Seabra LA;
XX XX
XX DR WPI; 1999-422071/36.
XX XX
XX PD 25-AUG-1999.
XX XX
XX PF 18-FEB-1998; 98GB-00003447.
XX PR 18-FEB-1998; 98GB-00003447.
XX PA (UYLI-) UNIV LIVERPOOL.
XX PI Warenus HM, Seabra L;
XX DR WPI; 1999-432548/37.
XX XX
XX PT Diagnosis of cancerous or pre-cancerous cells by monitoring the levels of
XX PT cyclin-dependent kinases 1 and 4.
XX XX
XX PS Example; Page 12; 26pp; English.
XX XX
XX CC The present invention describes a method for the diagnosis of a cancerous
XX CC or pre-cancerous state from the co-elevation of cyclin-dependent kinase 1
XX CC (CDK1) and CDK4 levels. The method may be used for the clinical diagnosis
XX CC of cancerous or pre-cancerous cells. In addition the combination of
XX CC targets may be used to screen for drugs that may specifically act on
XX CC cancer cells. The combination of CDK1, CDK4 elevation and p53 mutation in
XX CC combination form a complex target that is likely to be specific for
XX CC cancerous cells. AAAX90388 to AAAX90401 represent reverse transcription PCR
XX CC primer for the human p543 gene, used in an example from the present
XX CC invention.
XX XX
XX SQ Sequence 20 BP; 3 A; 3 C; 10 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. NO. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2695 CCACCTTCCACCCCTGCC 2712
DB 19 CCACCTTCCACCCCTGCCAC 2
RESULT 1588
AAAX90383/C
ID AAAX90383 standard; DNA; 20 BP.
XX AC
XX AC AAAX90383;
XX DT
XX DT 24-SEP-1999 (first entry)
XX DE Human p53 gene reverse transcription PCR primer exon 7 antisense.
XX XX
XX KW Human; p53; reverse transcription; PCR primer; cancer; cytotoxic;
XX KW signal transduction factor; mutant; cell cycle; apoptosis; chemotherapy;
XX KW ss.
XX OS
XX OS Synthetic.
XX OS Homo sapiens.
XX PN
XX PN GB2334579-A.
XX XX
XX PD 25-AUG-1999.
XX XX
XX PF 03-JUL-1998; 98GB-00014545.
XX PR 18-FEB-1998; 98GB-00003446.
XX PR 18-FEB-1998; 98GB-00003447.
XX PR 05-JUN-1998; 98GB-00012151.
XX XX
XX PA (UYLI-) UNIV LIVERPOOL.
XX PA (THER-) THERYTE LTD.
XX XX
XX PI Warenus HM, Seabra LA;
XX XX
XX DR WPI; 1999-422071/36.
```

XX Determination of sensitivity of cancer cells to anti-cancer agents.
PT Example 1; Page 18; 46pp; English.
XX The present invention describes a method for the determination of
CC sensitivity of cancer cells to anti-cancer agents by measuring the
CC mutational status, expression and /or function of signal transduction
CC factors. The method, by measuring the resistance of cells to anti-cancer
CC agents, is useful for selecting the most appropriate therapy for patients
CC suffering from cancer. AAX90374 to AAX90387 represent reverse
CC transposition PCR primer for the human p53 gene, used in an example from
CC the present invention
XX
SQ Sequence 20 BP; 3 A; 3 C; 10 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2695 CCACTTCCACCTGCCC 2712
19 CCACTTCCACCTGCCC 2
Db

RESULT 1589
AAX04029
ID AAX04029 standard; DNA; 20 BP.
XX
AC AAX04029;
DT 09-APR-1999 (first entry)
XX
DE Equine allele polymorphic site of clone 595-1 3'-distal sequence #1.
XX
KW Polymorphic site; equine allele; detection; identification; identity;
KW ancestry; genetic disease; cancer; asthma; blindness; haemophilia;
KW sickle-cell anaemia; ss.
XX
OS Equus caballus.
XX
PN WO9859066-A1.
XX
PD 30-DEC-1998.
XX
PF 24-JUN-1998; 98WO-US013042.
XX
PR 25-JUN-1997; 97US-00881845.
XX
PA (MOLE-) MOLECULAR TOOL INC.
XX
PI McIntosh T, Head S, Goelet P, Boyce-Jacino MT;
XX
DR WPI; 1999-081288/07.
XX
PT Detecting single nucleotide polymorphisms - by hybridisation with
PT interrogation primer and extending this with non-extendible nucleotide or
PT analogue which is then identified.
XX
PS Disclosure; Page 7; 57pp; English.
XX
CC A method has been developed for the detection of one or more single
CC polymorphisms in the same sample. The method comprises: (a) hybridising
CC at least one distinguishable interrogation oligonucleotide primer (IP) to
CC one or more target nucleic acids (TNA), each IP being specific for a
CC unique region in TNA with the 3'-end of IP immediately adjacent to a
CC specific and unique target nucleotide (nt); (b) extending IP with a
CC template-dependent polymerase in presence of at least one non-extendible
CC nt (or analogue); and (c) determining, for each IP, the identity of the
CC non-extendible nt or analogue incorporated, i.e. the complement of the
CC target nt, so identifying each target nt. The method is used to identify
CC a trait (specifically a genetic disease or condition) in nucleic acid
CC from an animal, plant, bacterium, fungus, yeast, viroid or other

CC heritable agent. Applications include determining identity (genetic
CC fingerprinting); ancestry; predisposition to genetic diseases or
CC conditions (e.g. cancer, asthma, blindness); presence or absence of
CC desirable trait; diagnosis of disease (e.g. haemophilia or sickle-cell
CC anaemia) and to relate polymorphisms to particular traits. AAX03996 to
CC AAX04067 represent the invariant 5'-proximal and 3'-distal sequences of
CC polymorphic sites of corresponding equine alleles
XX
SQ Sequence 20 BP; 1 A; 1 C; 7 G; 11 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2335 GTGTGTGTGTGTGTGC 2352
2 GTGTGTGTGTGTGTGC 19
Db

RESULT 1590
AAX04031/C
ID AAX04031 standard; DNA; 20 BP.
XX
AC AAX04031;
XX
DT 09-APR-1999 (first entry)
XX
DE Equine allele polymorphic site of clone 595-1 3'-distal sequence #2.
XX
KW Polymorphic site; equine allele; detection; identification; identity;
KW ancestry; genetic disease; cancer; asthma; blindness; haemophilia;
KW sickle-cell anaemia; ss.
XX
OS Equus caballus.
XX
PN WO9859066-A1.
XX
PD 30-DEC-1998.
XX
PF 24-JUN-1998; 98WO-US013042.
XX
PR 25-JUN-1997; 97US-00881845.
XX
PA (MOLE-) MOLECULAR TOOL INC.
XX
PI McIntosh T, Head S, Goelet P, Boyce-Jacino MT;
XX
DR WPI; 1999-081288/07.
XX
PT Detecting single nucleotide polymorphisms - by hybridisation with
PT interrogation primer and extending this with non-extendible nucleotide or
PT analogue which is then identified.
XX
PS Disclosure; Page 7; 57pp; English.
XX
CC A method has been developed for the detection of one or more single
CC polymorphisms in the same sample. The method comprises: (a) hybridising
CC at least one distinguishable interrogation oligonucleotide primer (IP) to
CC one or more target nucleic acids (TNA), each IP being specific for a
CC unique region in TNA with the 3'-end of IP immediately adjacent to a
CC specific and unique target nucleotide (nt); (b) extending IP with a
CC template-dependent polymerase in presence of at least one non-extendible
CC nt (or analogue); and (c) determining, for each IP, the identity of the
CC non-extendible nt or analogue incorporated, i.e. the complement of the
CC target nt, so identifying each target nt. The method is used to identify
CC a trait (specifically a genetic disease or condition) in nucleic acid
CC from an animal, plant, bacterium, fungus, yeast, viroid or other
CC heritable agent. Applications include determining identity (genetic
CC fingerprinting); ancestry; predisposition to genetic diseases or
CC conditions (e.g. cancer, asthma, blindness); presence or absence of
CC desirable trait; diagnosis of disease (e.g. haemophilia or sickle-cell
CC anaemia) and to relate polymorphisms to particular traits. AAX03996 to
CC AAX04067 represent the invariant 5'-proximal and 3'-distal sequences of

CC polymorphic sites of corresponding equine alleles
 XX Sequence 20 BP; 8 A; 1 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2826 ATATACATATATATAT 2843
 DB 18 ATATCAATATATATAT 1

RESULT 1591
 AAX04030/C
 ID AAX04030 standard; DNA; 20 BP.

XX AAX04030;

DT 09-APR-1999 (first entry)

DE Equine allele polymorphic site of clone 595-1 5'-proximal sequence #2.

XX Polymorphic site; equine allele; detection; identification; identity;
 KW ancestry; genetic disease; cancer; asthma; blindness; haemophilia;
 KW sickle-cell anaemia; ss.

OS Equus caballus.

XX WO9859066-A1.

PN 30-DEC-1998.

XX 24-JUN-1998; 98WO-US013042.

XX 25-JUN-1997; 97US-00881845.

PR (MOLE-) MOLECULAR TOOL INC.

PA McIntosh T, Head S, Goelet P, Boyce-Jacino MT;

XX WPI; 1999-081288/07.

XX Detecting single nucleotide polymorphisms - by hybridisation with
 PT interrogation primer and extending this with non-extensible nucleotide or
 PT analogue which is then identified.

XX Disclosure; Page 7; 57pp; English.

XX A method has been developed for the detection of one or more single
 CC polymorphisms in the same sample. The method comprises: (a) hybridising
 CC at least one distinguishable interrogation oligonucleotide primer (IP) to
 CC one or more target nucleic acids (TNA), each IP being specific for a
 CC unique region in TNA with the 3'-end of IP immediately adjacent to a
 CC specific and unique target nucleotide (nt); (b) extending IP with a
 CC template-dependent polymerase in presence of at least one non-extensible
 CC nt (or analogue); and (c) determining, for each IP, the identity of the
 CC target nt, so identifying each target nt. The method is used to identify
 CC a trait (specifically a genetic disease or condition) in nucleic acid
 CC from an animal, plant, bacterium, fungus, yeast, virus, viroid or other
 CC heritable agent. Applications include determining identity (genetic
 CC fingerprinting); ancestry; predisposition to genetic diseases or
 CC conditions (e.g. cancer, asthma, blindness); presence or absence of
 CC desirable trait; diagnosis of disease (e.g. haemophilia or sickle-cell
 CC anaemia) and to relate polymorphisms to particular traits. AAX03996 to
 CC AAX04067 represent the invariant 5'-proximal and 3'-distal sequences of
 CC polymorphic sites of corresponding equine alleles

XX Sequence 20 BP; 11 A; 7 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2335 GTGTGTGTGTGTGTGC 2352
 DB 19 GTGTGTGTGTGTATTC 2

RESULT 1592
 AAX04028
 ID AAX04028 standard; DNA; 20 BP.

XX AAX04028;

DT 09-APR-1999 (first entry)

DE Equine allele polymorphic site of clone 595-1 5'-proximal sequence #1.

XX Polymorphic site; equine allele; detection; identification; identity;
 KW ancestry; genetic disease; cancer; asthma; blindness; haemophilia;
 KW sickle-cell anaemia; ss.

OS Equus caballus.

PN WO9859066-A1.

XX 30-DEC-1998.

XX 24-JUN-1998; 98WO-US013042.

XX 25-JUN-1997; 97US-00881845.

PR (MOLE-) MOLECULAR TOOL INC.

PA McIntosh T, Head S, Goelet P, Boyce-Jacino MT;

XX WPI; 1999-081288/07.

XX Detecting single nucleotide polymorphisms - by hybridisation with
 PT interrogation primer and extending this with non-extensible nucleotide or
 PT analogue which is then identified.

XX Disclosure; Page 7; 57pp; English.

XX A method has been developed for the detection of one or more single
 CC polymorphisms in the same sample. The method comprises: (a) hybridising
 CC at least one distinguishable interrogation oligonucleotide primer (IP) to
 CC one or more target nucleic acids (TNA), each IP being specific for a
 CC unique region in TNA with the 3'-end of IP immediately adjacent to a
 CC specific and unique target nucleotide (nt); (b) extending IP with a
 CC template-dependent polymerase in presence of at least one non-extensible
 CC nt (or analogue); and (c) determining, for each IP, the identity of the
 CC target nt, so identifying each target nt. The method is used to identify
 CC a trait (specifically a genetic disease or condition) in nucleic acid
 CC from an animal, plant, bacterium, fungus, yeast, virus, viroid or other
 CC heritable agent. Applications include determining identity (genetic
 CC fingerprinting); ancestry; predisposition to genetic diseases or
 CC conditions (e.g. cancer, asthma, blindness); presence or absence of
 CC desirable trait; diagnosis of disease (e.g. haemophilia or sickle-cell
 CC anaemia) and to relate polymorphisms to particular traits. AAX03996 to
 CC AAX04067 represent the invariant 5'-proximal and 3'-distal sequences of
 CC polymorphic sites of corresponding equine alleles

XX Sequence 20 BP; 10 A; 1 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2826 ATATACATATATATAT 2843

DB 3 ATATCAATATATATAT 20

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RESULT 1593
AAZ03336/c
ID AAZ03336 standard; DNA; 20 BP.
XX
XX AAZ03336;
AC
XX
XX 07-OCT-1999 (first entry)
XX
XX PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
XX paratrachoma; inclusion conjunctivitis; genital disease; perithenaritis;
XX nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
XX bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
XX Synthetic.
XX Chlamydia trachomatis.
OS
XX WO928475-A2.
PN
XX
XX 10-JUN-1999.
PD
XX
XX 27-NOV-1998; 98WO-IB001939.
PF
XX
XX 28-NOV-1997; 97FR-00015041.
PR
XX 17-DEC-1997; 97FR-00016034.
PR
XX 04-NOV-1998; 98US-0107077P.
XX
XX (GEST ) GENSET.
PA
XX
XX Griffais R;
PI
XX
XX WPI; 1999-371125/31.
DR
XX
XX Genome sequence of Chlamydia trachomatis.
PT
XX
XX Disclosure; Page 1598; 1755pp; English.
PS
XX
XX PCR primers AAZ01426-206209 were used to amplify open reading frames
XX (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
XX encode polypeptides (see AAZ36754-Y37949) which can be used as vaccines
XX against Chlamydia trachomatis. Antisense and ribozyme sequences can also
XX be used to control growth of the microorganism. Chlamydia trachomatis is
XX responsible for a large number of diseases, e.g. eye diseases such as
XX conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
XX conjunctivitis; genital diseases such as nongonococcal urethritis,
XX epididymitis, cervicitis, salpingitis, perithenaritis, bartholinitis;
XX pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
XX The polypeptides of the invention may be of use in treating these
XX diseases
XX
XX Sequence 20 BP; 4 A; 2 C; 7 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1384 AACATCATCAACTGCTG 1401
DB 19 AACATCATCAATCAGCTG 2
RESULT 1594
AAZ26624/c
ID AAZ26624 standard; DNA; 20 BP.
XX
XX AAX26624;
AC
XX
XX 15-JUN-1999 (first entry)
DT
XX
XX PCR primer for amplification of human breast tumour cell line DNA.
DE
XX

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```

KW Detection; basepair mismatch cleavage product; mutation; PCR primer; ss.
XX Synthetic.
XX WO9913108-A1.
PN
XX
XX 18-MAR-1999.
PD
XX
XX 10-SEP-1998; 98WO-US018776.
PF
XX
XX 10-SEP-1997; 97US-0058419P.
PR
XX
XX (UYWA-) UNIV MARYLAND BALTIMORE.
PA
XX (HSUI/) HSIU I.
PA (SHIH/) SHIH J W.
PA (HIG/) HIGSMITH W E.
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
XX Hsu I, Shih JW, Highsmith WE;
PI
XX WPI; 1999-243734/20.
DR
XX
XX Detection of DNA and RNA mismatch cleavage products.
PT
XX
XX Example 1; Page 12; 42pp; English.
PS
XX
XX The specification describes methods for detection of DNA and RNA basepair
XX mismatch cleavage products, which indicates the presence and sequence of
XX target DNA and RNA. Detection of the target is enhanced by amplification
XX through recycling targets by maintaining an assay temperature between the
XX melting point of the target/probe duplex and that of the target/product
XX complex, in the presence of an amplifier. The methods are used to detect
XX and quantify specific DNA and RNA targets, e.g. in genetic diseases or
XX infectious agents. They can also be used to detect mutations. The methods
XX of the invention recycle the targets to dramatically increase the
XX sensitivity of the mismatch repair assay, and allows for detection of a
XX million or fewer target DNA or RNA molecules. PCR primers AAX26623-24
XX were used to exemplify the method of the invention
XX
XX Sequence 20 BP; 3 A; 3 C; 10 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2695 CCACCTTCCACCTGCC 2712
DB 19 CCACCTTGCACCTGCAC 2
RESULT 1595
AAZ10294/c
ID AAZ10294 standard; DNA; 20 BP.
XX
XX AAZ10294;
AC
XX
XX 20-MAR-2003 (revised)
DT
XX 08-NOV-1999 (first entry)
XX
XX Oligonucleotide used to inhibit c-ras gene expression.
DE
XX
XX Antisense oligonucleotide; c-ras; nuclease resistance;
KW RNase H strand cleavage; phosphorothioate; oligonucleotide therapeutic;
KW AIDS; atherosclerosis; ss.
XX
XX Synthetic.
XX
XX US955589-A.
PN
XX
XX 21-SEP-1999.
PD
XX
XX 06-JUN-1995; 95US-00465880.
PF
XX
XX

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PR 24-DEC-1991; 91US-00814961.
PR 23-DEC-1992; 92WO-US011339.
PR 21-JUN-1994; 94US-00244993.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Cook PD;
XX
XX WPI; 1999-539598/45.
XX
XX Oligonucleotides eliciting RNase H activity useful for diagnosis and
PT treatment of diseases e.g AIDS or atherosclerosis.
XX
XX Example 14; Col 24; 34pp; English.
XX
XX The present sequence represents a phosphorothioate antisense
CC oligonucleotide used to inhibit c-rat gene expression. The
CC oligonucleotide is a gapped 2' modified oligonucleotide, whereby one part
CC has at least two consecutive 2'-F (2'-H) nucleotides and the second part
CC has at least five consecutive nucleotides with 2'-H sugar moieties. The
CC modified oligonucleotide has increased nuclease resistance, and increased
CC binding affinity for substrates. The oligonucleotide elicits RNase H
CC strand cleavage of specific RNAs. Oligonucleotides of the invention are
CC useful for the diagnosis, detection and treatment of conditions
CC susceptible to oligonucleotide therapeutics (e.g. AIDS and
CC atherosclerosis). (Updated on 20-MAR-2003 to correct PR field.)
XX
XX Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 844 CTGCCAGCGGAGGAG 861
DB 20 CTGCCAGCGGAGGAG 3
RESULT 1596
AAX97187/C
ID AAX97187 standard; DNA; 20 BP.
XX
XX AAX97187;
XX
XX 13-SEP-1999 (first entry)
XX
XX Primer used to amplify Chlamydia pneumoniae polynucleotides.
DE
XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
XX Synthetic.
OS Chlamydothila pneumoniae.
XX
XX WO9927105-A2.
XX
XX 03-JUN-1999.
XX
XX 20-NOV-1998; 98WO-IB001890.
XX
XX 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
XX (GEST ) GENSET.
PA
XX Griffais R;
XX
XX WPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
PT
XX Page 1884; Disclosure; 1912pp; English.
PS
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AAX91990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotide sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
XX
XX Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 743 TTCTCTCTTCGACCAACG 760
DB 19 TCCTCTCTTCGACCAACG 2
RESULT 1597
AAX29342
ID AAX29342 standard; DNA; 20 BP.
XX
XX AAX29342;
XX
XX 10-JUN-1999 (first entry)
XX
XX Chemically modified sense control probe ISIS No: 14318.
XX
XX Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1;
KW JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe;
KW hyperproliferative disease; human; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO9909214-A1.
XX
XX 25-FEB-1999.
XX
XX 07-AUG-1998; 98WO-US016488.
XX
XX 13-AUG-1997; 97US-00910629.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX McKay R, Dean N, Monia BP, Nero PS, Gaarde WA;
PI
XX WPI; 1999-181060/15.
XX
XX New antisense oligonucleotides that detect and modulate the expression of
PT Jun N-terminal kinase proteins - useful for treating hyperproliferative
PT diseases and inhibiting tumor growth in animals, and for modulating
PT protein phosphorylation by these proteins.
XX
XX Example 4; Page 92; 190pp; English.
XX
XX The invention relates to antisense oligonucleotides that detect and
CC modulate the expression of Jun N-terminal kinase (JNK) proteins. The
CC oligonucleotides specifically hybridize to a nucleic acid encoding a
CC JNK1, JNK2 or JNK3 protein, and which modulate expression of these
CC proteins. The oligonucleotides are useful for modulating JNK protein
CC expression and cell cycle progression in cultured cells or animal cells.
CC The oligonucleotides are also useful for modulating the phosphorylation
CC of a protein that has been phosphorylated by a JNK protein, and the
CC expression of a cellular protein that promotes one or more metastatic
CC events. The oligonucleotides also form pharmaceutical compositions for
CC treating animals with a hyperproliferative disease, and for inhibiting

```

```

CC tumor growth in an animal
XX
SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1678 GACTTCGGGCTGGCCCGG 1695
Db 1 GACTTTGGCCTGGCCCGG 18

RESULT 1598
AAAX29331/C
ID AAX29331 standard; DNA; 20 BP.
XX
AC AAX29331;
XX
DT 10-JUN-1999 (first entry)
XX
DE JNK2-specific probe ISIS No: 12560.
XX
KW Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1;
KW JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe;
KW hyperproliferative disease; human; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9909214-A1.
XX
PD 25-FEB-1999.
XX
PF 07-AUG-1998; 98WO-US016488.
XX
PR 13-AUG-1997; 97US-00910629.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI McKay R, Dean N, Monia BP, Nero PS, Gaarde WA;
XX
DR WPI; 1999-181060/15.
XX
PT New antisense oligonucleotides that detect and modulate the expression of
PT Jun N-terminal kinase proteins - useful for treating hyperproliferative
PT diseases and inhibiting tumor growth in animals, and for modulating
PT protein phosphorylation by these proteins.
XX
XX Example 4; Page 87; 190pp; English.
XX
CC The invention relates to antisense oligonucleotides that detect and
CC modulate the expression of Jun N-terminal kinase (JNK) proteins. The
CC oligonucleotides specifically hybridize to a nucleic acid encoding a
CC JNK1, JNK2 or JNK3 protein, and which modulate expression of these
CC proteins. The oligonucleotides are useful for modulating JNK protein
CC expression and cell cycle progression in cultured cells or animal cells.
CC The oligonucleotides are also useful for modulating the phosphorylation
CC of a protein that has been phosphorylated by a JNK protein, and the
CC expression of a cellular protein that promotes one or more metastatic
CC events. The oligonucleotides also form pharmaceutical compositions for
CC treating animals with a hyperproliferative disease, and for inhibiting
CC tumor growth in an animal
XX
SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1678 GACTTCGGGCTGGCCCGG 1695
Db 20 GACTTTGGCCTGGCCCGG 3

vivo
XX
SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1678 GACTTCGGGCTGGCCCGG 1695
Db 1 GACTTTGGCCTGGCCCGG 18

RESULT 1599
AAA39285/C
ID AAA39285 standard; DNA; 20 BP.
XX
AC AAA39285;
XX
DT 13-SEP-2000 (first entry)
XX
DE Human cystatin C gene PCR primer SEQ ID NO:4.
XX
KW Keyhole limpet; diagnosis; Alzheimer's disease; cystatin C;
KW neuroprotective; nootropic; gene therapy; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200025138-A2.
XX
PD 04-MAY-2000.
XX
PF 22-OCT-1999; 99WO-EP008023.
XX
PR 23-OCT-1998; 98US-0105458P.
PR 06-NOV-1998; 98US-0107434P.
PR 26-JAN-1999; 99EP-00101377.
XX
PA (NITS/) NITSCH R.
XX
PI Nitsch R, Growdon J;
XX
DR WPI; 2000-350829/30.
XX
PT Diagnosing Alzheimer's disease comprising determining the level and/or
PT activity of a transcription and/or translation product of a cystatin C
PT gene or its polymorphic variant.
XX
XX Example 2; Page 37; 59pp; English.
XX
CC The present invention describes a method (M1) for diagnosing Alzheimer's
CC disease (AD) comprising determining the level and/or activity of a
CC transcription and/or translation product of a cystatin C gene (N1) or a
CC polymorphic variant (N1a) of N1. Also described are: (1) a method (M2)
CC for diagnosing AD comprising determining the presence or absence of a
CC polymorphism in a cystatin gene; (2) a kit for carrying out M1 or M2; (3)
CC a method (M3) for treating or preventing AD comprising administering an
CC agent (I) which affects the level and/or activity of N1 or N1a, or the
CC transcription and/or translation products of N1 or N1a; (4) the agent (I)
CC in (3); (5) a method (M4) for identifying (I) comprising: (a) providing a
CC sample comprising at least 1 of N1, N1a, a translation product of N1 or
CC N1a and a transcription product of N1 or N1a; (b) contacting the sample
CC with (I); and (c) comparing the activity and/or level of the substances
CC before and after step (b). The methods are useful for prevention,
CC diagnosis and treatment of AD. The present sequence represents a PCR
CC primer for the human cystatin C gene, which is used in an example from
CC the present invention
XX
SQ Sequence 20 BP; 3 A; 9 C; 5 G; 3 T; 0 U; 0 Other;

Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2940 TGGAGGGAGGCCCGG 2957
Db 19 TGGTGGGAGGCCCGG 2

RESULT 1600
AAA48651/C
ID AAA48651 standard; DNA; 20 BP.
XX
AC AAA48651;

```

XX
DT 20-SEP-2000 (first entry)
XX Antisense oligonucleotide ISIS no.15354 to human JNK2 gene.
DE
DE
XX Antisense; E-selectin; TNF alpha; cell adhesion;
KW tumour necrosis factor alpha; phosphorothioate; methoxyethoxy; sepsis;
KW rheumatoid arthritis; inflammatory; immune disease;
KW inflammatory bowel disease; allograft rejection; psoriasis;
KW diabetes; Grave's disease; allograft rejection; cancer; antibacterial;
KW immunosuppressive; antipsoriatic; antidiabetic; antithyroid; cytostatic;
KW dermatological; antiallergic; Ha-ras; C-raf; C-Jun N-terminal kinase;
KW JNK; ss.
XX
OS Homo sapiens.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..6
FT /*tag= a
FT /mod_base= OTHER
FT /note= "All bases are 2'-methoxyethoxy, additionally C
FT bases are m5c"
FT modified_base 7..15
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate internucleotide linkage"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "All bases are 2'-methoxyethoxy, additionally C
FT bases are m5c"
XX
XX WO200034303-A1.
XX
XX 15-JUN-2000.
XX
XX 08-DEC-1999; 99WO-US028965.
XX
XX 10-DEC-1998; 98US-00209668.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Xu XS;
XX
XX WPI; 2000-423367/36.
XX
XX Modulating cell adhesion molecule expression for treating immune or
XX inflammatory diseases involves treating cell with specific inhibitor of
XX Tumor Necrosis Factor alpha signalling molecule.
XX
XX Claim 36; Page 46; 100pp; English.
XX
XX A novel method for modulating cell adhesion molecule expression involves
XX antisense inhibition of a tumour necrosis factor (TNF) alpha signalling
XX molecule. In the method TNF alpha signalling molecules Ha-ras, C-raf and
XX c-Jun N-terminal kinase (JNK)2 were inhibited by antisense
XX oligonucleotides. In addition an antisense oligonucleotide to the cell
XX adhesion molecule E-selectin was also examined. The present sequence is
XX the JNK2 antisense oligonucleotide. The antisense oligonucleotides used
XX in the method contained modifications, namely phosphorothioate linkages
XX and 2'-methoxyethoxy bases. Some C residues also had a 5'methyl
XX modification. Inhibitors of the TNF alpha signalling molecules have
XX antibacterial, immunosuppressive, antipsoriatic, antidiabetic,
XX antithyroid, cycostatic, dermatological, antiallergic and
XX antiinflammatory activity. The antisense inhibitors may be useful for the
XX treatment of sepsis, rheumatoid arthritis, inflammatory, immune disease,
XX inflammatory bowel disease, allergic contact dermatitis, psoriasis,
XX diabetes, Grave's disease, allograft rejection and cancer
XX
XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 1.7e+03;
XX
XX

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1678 GACTTGGCGCTGCCCGG 1695
DB 20 GACTTGGCGCTGCCCGG 3
RESULT 1601
AAA64094
ID AAA64094 standard; DNA; 20 BP.
XX
AC AAA64094;
XX
DT 20-DEC-2000 (first entry)
XX
DE PCR primer for prostate cancer associated gene PS112 cDNA fragment.
XX
KW Prostate cancer associated gene; PS112; prostate disease;
KW prostate cancer; tumour; metastasis; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX US6110675-A.
XX
XX 29-AUG-2000.
XX
XX 08-OCT-1997; 97US-00946869.
XX
XX 08-OCT-1996; 96US-00727688.
XX
XX (ABBO) ABBOTT LAB.
XX
XX Friedman PN, Gordon J, Hodges SC, Klass MR, Cohen M;
XX Roberts-Rapp L, Russell JC, Stroupe SD, Yu H, Kratochvil JD;
XX WPI; 2000-571422/53.
XX
XX Novel methods for diagnosing prostate cancer by contacting test sample
XX with target specific polynucleotide and detecting prostate cancer
XX associated polynucleotides.
XX
XX Example 8; Col 71-72; 50pp; English.
XX
XX PCR primers AAA64094-95 were used to amplify a cDNA fragment of a human
XX prostate cancer associated gene, which is designated PS112. PS112
XX sequences are useful for detecting, diagnosing, staging, monitoring,
XX prognosticating, preventing, treating, or determining the predisposition
XX of an individual to disease and conditions of the prostate, such as
XX prostate cancer, tumours and metastases
XX
XX Sequence 20 BP; 0 A; 9 C; 0 G; 11 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 1.7e+03;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 921 CTCTTCTCTGTTTCATCCT 938
DB 2 CTCTTCTCTGTTTCCT 19
RESULT 1602
AAZ73476/c.
ID AAZ73476 standard; DNA; 20 BP.
XX
AC AAZ73476;
XX
DT 10-SEP-2001 (first entry)
XX
XX Human biallelic marker upstream amplification primer SEQ ID NO:7832.
XX
XX Human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW

KW haplotyping; hybridisation; identification; characterisation;
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;
 KW diagnosis; ss.

XX Homo sapiens.

XX WO9954500-A2.

XX 28-OCT-1999.

XX 21-APR-1999; 99WO-IB000822.

XX 21-APR-1998; 98US-0082614P.

XX 23-NOV-1998; 98US-0109732P.

XX (GEST) GENSET.

XX Cohen D, Blumenfeld M, Chumakov I;

XX WPI; 2000-013267/01.

XX Novel biallelic markers used to construct a high density disequilibrium
 PT map of the human genome.

XX Claim 9; Page 1900; 2745pp; English.

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
 CC invention, which contain a polymorphic base at position 24 of their
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
 CC primers for the biallelic markers. The biallelic markers of the invention
 CC have a variety of uses; they can be used for high density mapping of the
 CC human genome, and in complex association studies and haplotyping studies
 CC which are useful in determining the genetic basis for disease states.
 CC Compositions and methods of the invention can also be useful for the
 CC identification of the targets for the development of pharmaceutical
 CC agents and diagnostic methods, as well as the characterisation of the
 CC differential efficacious responses to and side effects from
 CC pharmaceutical agents acting on a disease as well as other treatment.
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 CC 3367, are not actually given a sequence in the Sequence Listing from the
 CC present invention

XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2974 CAGAGGACCAGGGCTTTT 2991

DB 20 CAGAGAACCCAGGGCTTGT 3

RESULT 1603

AAA79924/C

ID AAA79924 standard; DNA; 20 BP.

XX AAA79924;

XX 20-NOV-2000 (first entry)

XX Hepatitis B virus related oligonucleotide probe #187.

XX Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection;

XX mutation; high-density gene chip; ss.

XX Hepatitis B virus.

XX CN1252452-A.

XX 10-MAY-2000.

XX 24-SEP-1999; 99CN-00114460.

XX 24-SEP-1999; 99CN-00114460.
 XX (UYDO-) UNIV DONGNAN.
 XX Sun X, Lu Z, Wang Y;
 XX WPI; 2000-443233/39.
 XX High-density gene chip making process.

XX Example 1; Fig 15; 19pp; Chinese.

XX The present invention describes a method which comprises making a high-
 CC density gene chip, specifically for making high-density probe selecting process to
 CC oligonucleotide probes. An oligonucleotide probe selecting process to
 CC seek preferentially length variable and coverage variable probes is
 CC provided to ensure identical cross melting temperature of probes to the
 CC maximum limit, and this can make the cross control of gene chip
 CC relatively simple and raise the reliability of the gene chip detecting
 CC results. The process proposes a specific probe selection method for
 CC detecting target sequence directly, detecting mutation in both specific
 CC and non-specific sites and a probe overall arrangement scheme. AAA79738
 CC to AAA80201 represent oligonucleotide probe sequences which are used in
 CC examples from the present invention

XX Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 1.7e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1877 AGGAGCTCTTCAAGCTGC 1894

DB 18 AGGAGCTCTTCAAGCTGC 1

RESULT 1604

AAZ48164/C

ID AAZ48164 standard; DNA; 20 BP.

XX AAZ48164;

XX 14-MAR-2000 (first entry)

XX C-raf chimeric phosphorothioate oligonucleotide SEQ ID NO:11.

XX Polyribonucleotide solid phase synthesis; diagnosis; hybridisation;
 KW protein production modulation; 2'-deoxyfuranosyl moiety; anti-HIV;
 KW antiarteriosclerotic; nuclease resistant; atherosclerosis; AIDS;
 KW abnormal cell proliferation; tumour formation; ss.

XX Synthetic.

XX US6005087-A.

XX 21-DEC-1999.

XX 05-MAR-1998; 98US-00035357.

XX 11-JAN-1990; 90US-00463358.

XX 13-AUG-1990; 90US-00566977.

XX 12-AUG-1991; 91WO-US005720.

XX 05-MAR-1992; 92US-00835932.

XX 01-JUL-1992; 92US-00854634.

XX 06-JUN-1995; 95US-00468037.

XX (ISIS-) ISIS PHARM INC.

XX Kawasaki AM, Cook PD;

XX WPI; 2000-072074/06.

XX

PT Nuclease resistant oligonucleotides useful as research agents, diagnostic
 PT agents, and in the treatment of atherosclerosis and AIDS.
 XX
 XX
 XX Example 31; Col 51; 49pp; English.

CC The present invention describes nuclease resistant oligonucleotides (I)
 CC comprising 2'-fluoro modified ribofuranosyl nucleotides. (I) comprise
 CC covalently bound nucleotides, where the nucleotides are joined together
 CC by: (a) internucleotide linkages such that the base portion of the
 CC nucleotides forms a mixed base sequence; and (b) at least one of the
 CC nucleotides includes a modified ribofuranosyl group bearing a 2'-fluoro
 CC substituent; provided that at least two of the nucleotides are 2'-fluoro
 CC modified ribofuranosyl nucleotides when the internucleotide linkages are
 CC phosphodiester nucleotides. (I) bind to their target mRNA and inhibit its
 CC expression. (I) are resistant to nuclease degradation and hybridise with
 CC appropriate strength and fidelity to its target RNA/DNA. (I) are also
 CC useful as research agents, diagnostic agents and as oligonucleotide
 CC therapeutics. (I) may be used to treat atherosclerosis following
 CC angioplasty to prevent reocclusion of the treated arteries. (I) may also
 CC be used in conjunction with AZT to treat AIDS patients. (I) have been
 CC used to modulate the expression of RAF gene, a cellular gene whose
 CC activate form has been implicated in abnormal cell proliferation and
 CC tumour formation. (I) are also used to modulate the expression of protein
 CC kinase C. (I) exhibit hybridisation properties of higher quality than
 CC phosphorous modified oligonucleotide duplexes containing
 CC methylphosphonates, phosphoramidates and phosphate triesters. The present
 CC sequence represent an oligonucleotide used in the exemplification of the
 CC present invention
 XX
 XX

SQ Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 844 CTCGACCGGAGGAGGAG 861
 ||||| |||||
 DB 20 CTCGACCGGAGGAGGAG 3

RESULT 1605
 AAA48204
 ID AAA48204 standard; DNA; 20 BP.
 XX
 AC AAA48204;
 XX

DT 15-SEP-2000 (first entry)

XX Forward PCR primer for detection of microsatellite marker TNFRSF1B intron
 DE 4 polymorphic region.

XX Tumour necrosis factor; TNF; TNF-R2; TNFRSF1B; PCR primer;
 KW tumour necrosis factor receptor superfamily member 1B; human;
 KW cardiovascular disease; coronary artery disease;
 KW non-insulin dependent diabetes mellitus; neuropathy in NIDDM;
 KW essential hypertension; hyperlipidemia; diabetic neuropathy;
 KW vasoprotective; antihypertensive; lipid-lowering; chromosome 1p36.2;
 KW DIS2834; ss.
 XX

OS Homo sapiens.

XX WO200031293-A1.

XX 02-JUN-2000.

XX 25-NOV-1999; 99WO-AU001050.

XX 25-NOV-1998; 98AU-00007323.

XX (UNSY) UNIV SYDNEY.

XX Morris BJ;

XX

WPI; 2000-400096/34.

Method for diagnosing a predisposition to a complex polygenic disease
 e.g. coronary heart disease, hyperlipidemia and non-insulin-dependent
 diabetes mellitus comprises assaying chromosome 1 for a genetic marker.
 Claim 30; Page 4; 50pp; English.

XX A novel method for determining a predisposition in a subject to a complex
 CC polygenic disease involves assaying chromosome 1 for a genetic marker
 CC indicative of a predisposition to the disease. This method may be used
 CC for determining predisposition to cardiovascular disease, coronary artery
 CC disease, non-insulin dependent diabetes mellitus, neuropathy in NIDDM,
 CC essential hypertension, hyperlipidemia and diabetic neuropathy. The
 CC method can be used for testing an individual with a family history or in
 CC the early stages of a complex polygenic disease to ascertain the chance
 CC of developing hypertension, neuropathy or lipid disturbances such as high
 CC total cholesterol, high low density lipoprotein cholesterol, abnormal
 CC apolipoprotein A1 and abnormal glycosylated haemoglobin. Once a complex
 CC polygenic disease disposition has been identified the subject can be
 CC treated to prevent or reduce the disease or delay its onset. The genetic
 CC marker used in the method is DIS2834 and includes a CA repeat region in
 CC intron 4 of the tumour necrosis factor receptor superfamily member 1B
 CC (TNFRSF1B) gene. The marker is located at chromosome 1p36.2. The present
 CC sequence is the forward PCR primer used for detection of the
 CC microsatellite marker TNFRSF1B intron 4 polymorphic region
 XX
 SQ Sequence 20 BP; 3 A; 2 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2316 TCTGTGTGTGTGTGTG 2333
 ||||| |||||
 DB 3 TCTGTGTGTGTGTGTG 20

RESULT 1606
 AAA78224
 ID AAA78224 standard; DNA; 20 BP.
 XX
 AC AAA78224;
 XX

DT 16-NOV-2000 (first entry)

XX Anti-human Fas antibody CH11 H chain cDNA specific primer SHP-15.

XX Antirheumatic agent; immunoglobulin M; IgM; apoptosis inducer;
 KW immunosuppression; autoimmune disease; treatment; rheumatism;
 KW anti-Fas antibody; primer; ss.

OS Synthetic.

XX JF2000154149-A.

XX 06-JUN-2000.

XX 17-SEP-1999; 99JP-00263984.

XX 18-SEP-1998; 98JP-00264598.

XX (SANY) SANKYO CO LTD.

XX WPI; 2000-454476/40.

XX Anti-human Fas humanizing antibody-containing antirheumatic agents.

XX Disclosure; Page 16; 109pp; Japanese.

XX The present invention relates to antirheumatic agents which comprise as
 CC active ingredients an immunoglobulin M (IgM) protein. The IgM protein
 CC does not include a J segment, has apoptosis inducing activity, and

CC consists of a light and heavy chain polypeptide produced synthetically.
 CC The agents of the invention exhibit antirheumatic and immunosuppressive
 CC activity and can be used to treat autoimmune diseases, especially
 CC rheumatism. The IGM molecule used in the invention has human Fas-antigen
 CC binding properties. Included in the invention are nucleotide sequences of
 CC the IGM light and heavy chains (see AAA78267-A78272) and the
 CC corresponding protein sequences (see AAB12913-B12918 and AAB12919), and
 CC nucleotide sequences of the humanised anti-human Fas Ig CH11 (see
 CC AAA78202-A78206) and protein sequences (see AAB12908-B12910). Also
 CC included are anti-human Fas antibody CDR peptides (AAB12902-B12907).
 CC Primers specific for the anti-human Fas antibody, light, heavy and kappa
 CC chains used in the invention are represented by sequences AAA78213-
 CC A78266. Primers used for sequencing the human Ig DNA used in the
 CC invention are represented by sequences AAA78277-A78318 and AAA78335-
 CC A78337, while humanised anti-Fas Ig DNA sequencing primers are
 CC represented by sequences AAA78321-A78334 and AAA78338-A78367. Primer
 CC sequences AAA78207-A78212 are specific for murine Ig DNA, and are used in
 CC the production of the agent of the invention

XX
 SQ Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 604 GTGTACGTCACGCACAG 621
 DB 3 GTGTACGTCACGCACAG 20

RESULT 1607
 AAC60587/c
 ID AAC60587 standard; DNA; 20 BP.
 AC AAC60587;
 XX
 XX 31-JAN-2001 (first entry)
 XX
 XX Human fra-1 mRNA antisense oligonucleotide ISIS 109078.

XX Human; fra-1; antisense oligonucleotide; phosphorothioate; cytostatic;
 KW antiinflammatory; 2'-methoxyethyl wing; 2'-MOE wing; infection; cancer;
 XX ss.

XX Homo sapiens.
 OS Synthetic.
 XX
 XX US6124133-A.
 XX
 XX 26-SEP-2000.
 XX
 XX 15-OCT-1999; 99US-00418641.
 XX
 XX 15-OCT-1999; 99US-00418641.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Taylor JK, Cowser LM;
 XX
 XX WPI; 2000-601552/57.

XX Novel antisense compound 8-30 nucleobases in length targeted to human fra-
 PT 1 and which specifically hybridizes with and inhibits the expression of
 PT human fra-1, useful for modulating the expression of fra-1 in cells.

XX Claim 3; Col 42; 38pp; English.
 XX
 XX The present sequence is one of a large number of antisense
 CC oligonucleotides which are targeted to nucleic acids encoding fra-1. The
 CC sequences may be oligodeoxyribonucleotides or chimeric oligonucleotides
 CC containing a central gap region consisting of ten 2'-deoxynucleotides,
 CC which is flanked on both sides by 2'-methoxyethyl (2'-MOE) wings. The
 CC oligonucleotides have a phosphorothioate backbone and the cytidine

CC residues in the 2'-MOE wings are 5-methylcytidines. The fra-1 antisense
 CC oligonucleotides are useful for inhibiting the expression of fra-1 in
 CC human cells or tissues. They can be used for diagnostics, therapeutics,
 CC prophylaxis and as research reagents and in kits. Use of the antisense
 CC compounds may also be useful prophylactically, e.g. to prevent or delay
 CC infection, inflammation or tumour formation

XX
 SQ Sequence 20 BP; 5 A; 2 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1123 ACGCTGCCCAATGTCTCC 1140
 DB 20 ACCCTAGCCAATGTCTCC 3

RESULT 1608
 AAC62885
 ID AAC62885 standard; DNA; 20 BP.
 XX
 AC AAC62885;
 XX
 XX 06-FEB-2001 (first entry)
 XX
 XX JNK antisense oligonucleotide ISIS #14318.

XX Antisense; gene therapy; JNK2 protein; apoptosis; cancer;
 KW cellular hyperproliferation; Alzheimer's; Parkinson's disease;
 KW myotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;
 KW myocardial infarction; stroke; obstructive jaundice; polycystic kidney;
 KW diabetes; Jun N-terminal kinase; ss.

XX Homo sapiens.
 OS
 XX
 XX WO200059549-A1.
 XX
 XX 12-OCT-2000.

XX 04-APR-2000; 2000WO-US008880.
 XX
 XX 07-APR-1999; 99US-00287796.

XX (ISIS-) ISIS PHARM INC.

XX McKay R, Dean NM, Monia BP, Nero PS, Gaarde WA;

XX WPI; 2000-638427/61.

XX Novel methods for reducing apoptosis comprising contacting cells with
 PT antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
 PT cancer.

XX Example 4; Page 135; 160pp; English.

XX The present invention relates to antisense oligonucleotides (AAC62844-
 CC C63000, AAA96093-A96099 and AAA07993) that hybridise specifically to a
 CC nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in
 CC decrease of JNK2 expression and leading to induction of apoptosis. The
 CC present sequence is one such antisense oligonucleotide. The
 CC oligonucleotides of the present invention are useful for treating
 CC diseases or conditions with reduced apoptosis, e.g. cancer and cellular
 CC hyperproliferation. The oligonucleotides may also be used to increase the
 CC stimulation of apoptotic proteins, e.g. for treating Alzheimer's or
 CC Parkinson's disease, amyotrophic lateral sclerosis, retinitis,
 CC pigmentosa, epilepsy, myocardial infarction, stroke, obstructive
 CC jaundice, polycystic kidney and diabetes. The present sequence may have a
 CC phosphorothioate backbone

XX Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 1.7e+03; Mismatches 2; Indels 0; Gaps 0;

QY 1678 GACTTCGGCTGGCCCGG 1695
 Db 1 GACTTTGGCTGGCCCGG 18

RESULT 1609
 AAC62874/c
 ID AAC62874 standard; DNA; 20 BP.
 XX AAC62874;
 AC AAC62874;
 XX 06-FEB-2001 (first entry)
 XX JNK antisense oligonucleotide ISIS #12560.
 DE Antisense; gene therapy; JNK2 protein; apoptosis; cancer;
 XX cellular hyperproliferation; Alzheimer's; Parkinson's disease;
 KW myelotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;
 KW myocardial infarction; stroke; obstructive jaundice; polycystic kidney;
 KW diabetes; Jun N-terminal kinase; ss.
 XX Homo sapiens.
 OS WO200059549-A1.
 XX 12-OCT-2000.
 PD 04-APR-2000; 2000WO-US008880.
 XX 07-APR-1999; 99US-00287796.
 XX (ISIS-) ISIS PHARM INC.
 PA McKay R, Dean NM, Monia BP, Nero PS, Gaarde WA;
 PI WPI; 2000-638427/61.
 DR Novel methods for reducing apoptosis comprising contacting cells with
 PT antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
 PT cancer.
 XX Claim 3; Page 133; 160pp; English.
 CC The present invention relates to antisense oligonucleotides (AAC62844-
 CC C63000, AAA96093-A96099 and AAA7993) that hybridize specifically to a
 CC nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in
 CC decrease of JNK2 expression and leading to induction of apoptosis. The
 CC present sequence is one such antisense oligonucleotide. The
 CC oligonucleotides of the present invention are useful for treating
 CC diseases or conditions with reduced apoptosis, e.g. cancer and cellular
 CC hyperproliferation. The oligonucleotides may also be used to increase the
 CC stimulation of apoptotic proteins, e.g. for treating Alzheimer's or
 CC Parkinson's disease, amyotrophic lateral sclerosis, retinitis,
 CC pigmentosa, epilepsy, myocardial infarction, stroke, obstructive
 CC jaundice, polycystic kidney and diabetes. The present sequence may have a
 CC phosphorothioate backbone
 XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1678 GACTTCGGCTGGCCCGG 1695
 Db 20 GACTTTGGCTGGCCCGG 3

RESULT 1610
 AAA73514/c

AAA73514 standard; DNA; 20 BP.
 AAA73514;
 28-NOV-2000 (first entry)
 c-rac kinase antisense oligonucleotide #35 (ISIS #7854).
 Human; c-rac; protein kinase; antisense oligonucleotide; cancer;
 signal transduction; hyperplasia; pulmonary fibrosis; angiogenesis;
 psoriasis; atherosclerosis; smooth muscle cell proliferation; stenosis;
 restenosis; inflammatory disorder; tissue graft rejection;
 endotoxin shock; glomerular nephritis; ss.
 Homo sapiens.
 Key Location/Qualifiers
 modified_base 1..20
 /tag= a
 /mod_base= OTHER
 /note= "All or some nucleotides are optionally with 2'-
 methoxyethoxy modification. Also, optionally
 phosphodiester or phosphothioate backbone"
 US6090626-A.
 18-JUL-2000.
 28-AUG-1998; 98US-00143214.
 31-MAY-1994; 94US-00250856.
 31-MAY-1995; 95WO-US007111.
 26-NOV-1996; 96US-00756806.
 (ISIS-) ISIS PHARM INC.
 Boggs RT, Monia BP;
 WPI; 2000-531424/48.
 Antisense oligonucleotides targeted to nucleic acid molecule encoding
 human raf useful for diagnosis, treatment of raf-associated cell
 proliferative conditions such as cancer, psoriasis or blood vessel
 restenosis.
 Claim 31; Col 10; 31pp; English.
 c-rac is a serine-threonine-specific protein kinase and is thought to
 play a fundamental role in signal transduction, and cell proliferation
 control. The present sequence is an antisense oligonucleotide. This
 sequence is targeted to human c-rac gene, resulting in c-rac expression
 inhibition. The present sequence may be useful for treating and raf-
 associated cell hyperproliferation conditions such as cancer,
 hyperplasias, pulmonary fibrosis, angiogenesis, psoriasis,
 atherosclerosis and smooth muscle cell proliferation in blood vessels
 e.g. stenosis or restenosis following angioplasty. Also, the present
 sequence may be useful for treating inflammatory disorders such as tissue
 graft rejection, endotoxin shock and glomerular nephritis
 Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 844 CTGCCAGCCGAGGAGGAG 861
 Db 20 CTGCCAGCCGAGGAGGAG 3

RESULT 1611
 AAS06848
 ID AAS06848 standard; DNA; 20 BP.

XX AC AAS06848;
XX XX
XX DT 12-SEP-2001 (first entry)
XX DE
XX XX SNP containing protein kinase DNA sequence #17.
XX KW Human; protein kinase; PTK; STK; cancer; cardiovascular disease; SNP;
XX KW metabolic disorder; immune related disease; neurological disorder;
XX KW neurodegenerative disorder; inflammatory disorder; infectious disease;
XX KW reproductive disorder; gene therapy; single nucleotide polymorphism; ds.
XX OS Homo sapiens.
XX XX
XX XX WO200138503-A2.
XX XX 31-MAY-2001.
XX XX 22-NOV-2000; 2000WO-US032085.
XX XX 24-NOV-1999; 99US-0167482P.
XX XX (SUGE-) SUGEN INC.
XX XX Plowman GD, Whyte D, Manning G, Sudarsanam S, Martinez R;
XX XX Flanagan P, Clary D;
XX XX WPI; 2001-343950/36.
XX XX
XX XX Nucleic acids encoding human kinase polypeptides, useful for preventing
XX XX diagnosing and/or treating e.g. cancer, immune, cardiovascular and
XX XX neuronal-associated diseases, and microbial infections.
XX XX Example 8B; Page 330; 433pp; English.
XX XX
XX CC AAS06832-AAS06997 represent part of a polynucleotide sequence encoding
XX CC for novel human protein kinases where a single nucleotide polymorphism
XX CC (SNP) has been identified. The SNP occurs at the last position of the
XX CC present sequence. The sequences are described relating to the invention
XX CC of novel human protein kinases #1-57 (AAU03501-AAU03557). The novel
XX CC protein kinases have been identified as members of the tyrosine or
XX CC serine/threonine kinase (PTK and STK) families. The polynucleotides
XX CC encoding protein kinases and the polypeptides may be used in the
XX CC prevention, diagnosis and treatment of diseases associated with
XX CC inappropriate kinase expression. For example, they may be used to treat
XX CC cancers (especially cancers of haematopoietic origin), cardiovascular
XX CC disease (e.g. atherosclerosis), metabolic disorders (e.g. diabetes),
XX CC immune related diseases (e.g. rheumatoid arthritis), neurological
XX CC disorders (e.g. schizophrenia), neurodegenerative disorders (e.g.
XX CC Parkinson's disease), inflammatory disorders (e.g. asthma), infectious
XX CC disease (e.g. HIV) and reproductive disorders (e.g. infertility).
XX CC Additionally, polynucleotides encoding protein kinases may be used for
XX CC gene therapy and as DNA probes in diagnostic assays. The protein kinase
XX CC polypeptides may be used as antigens in the production of antibodies
XX CC against the protein kinases and in assays to identify modulators of
XX CC protein kinase expression and activity
XX XX
XX SQ Sequence 20 BP; 2 A; 6 C; 7 G; 4 T; 0 U; 1 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps

QY 503 TGCACGTGCTGGAGCGCT 520
||| ||||| ||||| |||||
Db 1 TGGCCGTGCTGGAGCCCT 18

RESULT 1612
AAC81210
ID AAC81210 standard; DNA; 20 BP.
XX AC
XX AAC81210;

XX Antisense oligonucleotide; daxx; inhibition; phosphorothioate;
 KW Fas binding protein; CENP-C binding protein; dap6; EAP; cytostatic;
 KW antiinflammatory; death associated protein 6; Ets-1 associated protein;
 KW infection; inflammation; tumour formation; ss.
 XX
 OS Homo sapiens.
 XX
 PN US6180353-B1.
 XX
 PD 30-JAN-2001.
 XX
 PF 24-JAN-2000; 2000US-00490692.
 XX
 PR 24-JAN-2000; 2000US-00490692.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Dean NM, Cowser LM;
 XX
 DR WPI; 2001-217744/22.
 XX
 PT Novel antisense compounds capable of modulating expression of daxx useful
 PT for diagnosis, prophylaxis and treatment of diseases associated with
 PT expression of daxx.
 XX
 PS Claim 1; Col 42; 59pp; English.
 XX
 CC The present invention describes an antisense compound (I) up to 30
 CC nucleobases in length, where (I) inhibits expression of daxx (also known
 CC as Fas binding protein, CENP-C binding protein, dap6 for death associated
 CC protein 6 and EAP for Ets-1 associated protein). (I) has cytostatic and
 CC antiinflammatory activity, and can be used in antisense therapy and as a
 CC modulator of daxx. (I) is useful for inhibiting the expression of daxx in
 CC cells or tissues in vitro. (I) can be utilised for diagnostics,
 CC therapeutics for the treatment of diseases associated with the expression
 CC of daxx, prophylaxis e.g. to prevent or delay infection, inflammation or
 CC tumour formation and as research reagent. The present sequence represents
 CC an inhibitory human daxx antisense phosphorothioate oligonucleotide which
 CC is used in the exemplification of the present invention
 XX
 SQ Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1169 GGGAGCTGTCTCGGCC 1186
 DB 18 GGGTCCTGTCTCGGCC 1
 RESULT 1614
 AAF59860/C
 ID AAF59860 standard; DNA; 20 BP.
 XX
 AC AAF59860;
 XX
 DT 04-MAY-2001 (first entry)
 XX
 DE Human protein kinase C-theta antisense oligonucleotide, SEQ ID NO:53.
 XX
 KW Human protein kinase C-theta; PKCT; PKCT; nPKC-theta; PRKQC;
 KW isozyme; serine/threonine protein kinase; signal transduction;
 KW calcium-independent function; JNK/SAPK pathway upstream activator;
 KW Jun N-terminal kinase/stress-activated protein kinase;
 KW T-cell signalling pathway; cell cycle control; cellular activation;
 KW API transcription factor activation; AIDS aetiology; apoptosis;
 KW cytoskeletal arrangement; proliferation; wound healing disorder;
 KW angiogenesis; insulin signalling; chromosome 10p15;
 KW expression inhibition; antisense; cancer; inflammation; diabetes;
 KW phosphorothioate; 2'-MOE gapmer; ss.
 XX

OS Homo sapiens.
 XX
 PN US6190869-B1.
 XX
 PD 20-FEB-2001.
 XX
 PF 26-OCT-1999; 99US-00429322.
 XX
 PR 26-OCT-1999; 99US-00429322.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Bennett CF, Cowser LM;
 XX
 DR WPI; 2001-210378/21.
 XX
 PT Novel antisense compound 8-30 nucleobases in length targeted to a nucleic
 PT acid molecule encoding human protein kinase C-theta useful for inhibiting
 PT expression of human protein kinase C-theta in human cells.
 XX
 PS Claim 3; Col 43-44; 40pp; English.
 XX
 CC Sequences AAF59817-AAF59896 represent phosphorothioate 2'-MOE gapmer
 CC antisense targeted to the human protein kinase C-theta gene, which
 CC inhibit its expression. The antisense oligonucleotides were designed to
 CC target different regions of the human protein kinase C-theta RNA, and
 CC were analysed for their effect on protein kinase C-theta mRNA levels by
 CC quantitative real-time PCR. Protein kinase C-theta (also known as PKC-
 CC theta, PKCT, PRKCT, nPKC-theta and PRKQC) is one of several protein
 CC kinase C isozymes and is ubiquitously expressed, with the highest levels
 CC being found in haematopoietic cell lines. It has been shown to function
 CC in a calcium-independent fashion, and it is involved in a variety of
 CC signal transduction pathways, for example, it is an upstream activator of
 CC the JNK/SAPK (Jun N-terminal kinase/stress-activated protein kinase)
 CC pathway. Protein kinase C-theta is also involved in T-cell signalling
 CC pathways, cell cycle control, cellular activation, API transcription
 CC factor activation and the aetiology of AIDS, and has also been implicated
 CC in apoptosis, cytoskeletal arrangement, proliferation, and angiogenesis
 CC and wound repair. It is additionally involved in insulin signalling and
 CC is thought to play a role in the development of diabetes in humans. The
 CC oligonucleotides of the invention are useful for diagnosis, prevention
 CC and treatment of conditions associated with protein kinase C-theta
 CC expression, such as inflammation, cancer, wound healing disorders and
 CC diabetes
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1872 TGTGGAGGAGCTCTTCAA 1889
 DB 18 TGGAGGAGGAGCTCTTCCA 1
 RESULT 1615
 AAH75019/C
 ID AAH75019 standard; DNA; 20 BP.
 XX
 AC AAH75019;
 XX
 DT 29-OCT-2001 (first entry)
 XX
 DE PCR primer for human fibroblast growth factor 23 (FGF-23) cDNA.
 XX
 KW Fibroblast growth factor 23; FGF-23; injury; placental cell; ulcer;
 KW congenital defect; fertility; abnormal growth; thymus function; leukemia;
 KW lymphoma; autoimmune disease; proliferative disorder;
 KW differentiation disorder; central nervous system disorder; infarction;
 KW Parkinson's disease; Alzheimer's disease; Crohn's disease; inflammation;
 KW intestinal wound; motility disorder; absorption disorder; stroke;
 KW congenital malformation; ischemic vascular disease; myocardial ischemia;
 KW

KW ribosome transport; cytokinesis; nucleogenesis; cell proliferation;
 KW cell growth; transcriptional repression; replication;
 KW signal transduction; chromatin decondensation; Ag-NOR family;
 KW nucleolin antibody; systemic connective tissue disease; SLE;
 KW systemic lupus erythematosus;
 KW scleroderma-like chronic graft versus host disease;
 KW expression inhibition; tumour formation; cancer; inflammation;
 KW immune disorder; phosphorothioate; antisense oligonucleotide; ss.
 XX Homo sapiens.
 XX
 XX US6165786-A.
 XX
 XX PD 26-DEC-2000.
 XX
 XX PF 03-NOV-1999; 99US-00433699.
 XX
 XX PR 03-NOV-1999; 99US-00433699.
 XX
 XX PA (ISIS-) ISIS PHARM INC.
 XX
 XX PI Bennett CF, Cowseert LM;
 XX
 XX DR WPI; 2001-079848/09.
 XX
 XX Novel antisense compound targeted to human nucleolin which specifically
 PT hybridizes with and inhibits the expression of human nucleolin, useful
 PT for modulating the expression of nucleolin in cells.
 XX
 XX Example 15; Col 41-42; 41pp; English.
 XX
 XX Sequences AAC92560-C92639 represent antisense oligonucleotides targeted
 CC to the human nucleolin gene, which inhibit its expression. The antisense
 CC oligonucleotides were designed to target different regions of the human
 CC nucleolin mRNA, and were analysed for their effect on nucleolin mRNA
 CC levels by quantitative real-time PCR. Nucleolin (also known as p32 or
 CC C23) is the most abundant nucleolar phosphoprotein in actively growing
 CC cells. Nucleolin primarily participates in ribosome biogenesis and
 CC transport of ribosomal components, being able to transiently bind to pre-
 CC ribosomes in the nucleolus via a ribonucleoprotein consensus sequence.
 CC However, it has also been shown to be involved in cytokinesis,
 CC nucleogenesis, cell proliferation and growth, transcriptional repression,
 CC replication, signal transduction, and chromatin decondensation. Nucleolin
 CC is a member of the Ag-NOR (active ribosomal gene located in the nucleolar
 CC organismer region) family of proteins which are markers of active
 CC ribosomal genes, and whose expression is associated with the prediction
 CC of tumour growth rate. The presence of antibodies against nucleolin are
 CC associated with systemic connective tissue diseases such as systemic
 CC lupus erythematosus (SLE) and scleroderma-like chronic graft versus host
 CC disease. The oligonucleotides of the invention are useful for diagnosis,
 CC prevention and treatment of conditions associated with nucleolin
 CC expression, such as tumour formation, immune disorders and inflammation
 XX
 SQ Sequence 20 BP; 4 A; 9 C; 0 G; 7 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1358 TGATGAAGATGATCGGGA 1375
 DB 20 TGATGAAGATGATGAGGA 3
 RESULT 1618
 AAH23754/c
 ID AAH23754 standard; DNA; 20 BP.
 XX
 XX AAH23754;
 XX
 XX DT 13-AUG-2001 (first entry)
 XX
 XX JNK1 antisense oligonucleotide, JNK2AS, (ISIS #12560).

XX JNK; jun kinase; antisense; cytostatic; cancer;
 KW 2'-O-methoxyethyl oligonucleotide; MOE; phosphorothioate; ss.
 XX Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "This oligonucleotide is a 2'-O-methoxyethyl (MOE)
 FT chimeric antisense oligonucleotide containing five
 FT MOE/phosphodiester residues flanking a 2'-
 FT deoxynucleotide/phosphorothioate region"
 XX
 XX WO200134792-A2.
 XX
 XX PD 17-MAY-2001.
 XX
 XX PF 10-NOV-2000; 2000WO-US030869.
 XX
 XX PR 12-NOV-1999; 99US-0165224P.
 XX
 XX PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
 XX
 XX Potapova O, Gorospe M, Holbrook NJ;
 XX WPI; 2001-335925/35.
 XX
 XX Use of Jun Kinase antisense mRNA for treating cancer by administering
 PT vector comprising promoter operably linked to DNA sequence that encodes
 PT the antisense mRNA to patient diagnosed with cancer.
 XX
 XX Claim 1; Page 41; 75pp; English.
 XX
 XX The present invention relates to the use of Jun Kinase (JNK) antisense
 CC oligonucleotides for treating cancer and for screening compounds that
 CC mimic or augment the effect of JNK antisense oligonucleotides treatment
 CC for cancer. The present sequence is one such JNK antisense
 CC oligonucleotide
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1678 GACTTCGGGCTGCGCCGG 1695
 DB 20 GACTTTGGCTGCGCCGG 3
 RESULT 1619
 AAF31497/c
 ID AAF31497 standard; DNA; 20 BP.
 XX
 XX AAF31497;
 XX
 XX DT 06-APR-2001 (first entry)
 XX
 XX Beta-fructofuranosidase sense primer.
 DE Beta-fructofuranosidase; transfructosylated; food; drug; ss.
 KW Beta-fructofuranosidase; transfructosylated; food; drug; ss.
 XX
 XX Arthrobacter sp.
 XX
 XX CA2298400-A1.
 PN
 XX PD 08-DEC-2000.
 XX
 XX PF 17-FEB-2000; 2000CA-02298400.
 XX
 XX PR 08-JUN-1999; 99JP-00160416.

XX PA (NORQ) SOC TECHNO-INNOVATION AGRIC FORESTY & FI.
 XX PI Hara K, Tonozuka T, Ito T, Sakano Y, Fujita K;
 XX XX WPI; 2001-123506/14.
 XX XX Novel beta fructofuranosidase gene useful for producing beta
 PT fructofuranosidase and for developing variant enzymes that have increased
 PT heat resistance and transfer ratio by means of genetic engineering
 PT techniques.
 XX PS Disclosure; Page 29; 34pp; English.
 XX XX The present invention relates a beta-fructofuranosidase gene. The
 CC invention is useful for the development of variant enzymes that have
 CC increased heat resistance and transfer ratio by means of genetic
 CC engineering techniques. Beta-fructofuranosidase is useful in the
 CC synthesis of transfructosylated oligosaccharides such as lactosucrose,
 CC for use in fields of foods and drugs
 XX XX Sequence 20 BP; 3 A; 5 C; 7 G; 1 T; 0 U; 4 Other;
 SQ Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 72.2%; Pred. No. 1.7e+03;
 Matches 13; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
 QY 528 CCGGCCCATCTCGAGC 545
 DB 19 CCGGCCCATCTCGAGC 2
 RESULT 1620
 AAF99183/C
 ID AAF99183 standard; DNA; 20 BP.
 XX AC AAF99183;
 XX DT 12-JUN-2001 (first entry)
 XX DE Immunostimulatory nucleic acid #299.
 XX XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
 XX OS Synthetic.
 XX PN WO200122972-A2.
 XX PD 05-APR-2001.
 XX PF 25-SEP-2000; 2000WO-US026383.
 XX PR 25-SEP-1999; 99US-0156113P.
 XX PR 27-SEP-1999; 99US-0156135P.
 XX PR 23-AUG-2000; 2000US-0227436P.
 XX XX (IOWA) UNIV IOWA RES FOUND.
 XX PA (COLE-) COLEY PHARM GMBH.
 XX PI Krieg AM, Schetter C, Vollmer J;
 XX XX WPI; 2001-273485/28.
 XX XX Vaccinating against tumors, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids.
 XX PS Claim 101; Page 44; 338pp; English.
 XX XX The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic

CC acid to a non-rodent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
 CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the
 CC present sequence may have a phosphorothioate backbone
 XX XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1678 GACTTCGGGCTGCGCGG 1695
 DB 20 GACTTCGGGCTGCGCGG 3
 RESULT 1621
 AAS03300
 ID AAS03300 standard; DNA; 20 BP.
 XX AC AAS03300;
 XX DT 07-SEP-2001 (first entry)
 XX DE Mycoplasma hyopneumoniae MHP3 antigen, sequencing primer #1.
 XX KW MHP3; antigen; ss; vaccine; enzootic mycoplasma pneumonia;
 KW sequencing primer; antibody; immunoassay; immunotherapy;
 KW anti-idiotypic antibody.
 XX OS Mycoplasma hyopneumoniae.
 XX PN BP1090995-A2.
 XX PD 11-APR-2001.
 XX PF 26-SEP-2000; 2000EP-00308421.
 XX PR 29-SEP-1999; 99US-0156602P.
 XX PA (PFIZ) PFIZER PROD INC.
 XX PI King KW, Madura RA, Rosey EL;
 XX XX WPI; 2001-309781/33.
 XX XX New apoprotein antigens encoded by mhp3 gene from Mycoplasma
 PT hyopneumoniae useful as a vaccine for treating or preventing diseases
 PT caused by Mycoplasma hyopneumoniae.
 XX PS Example; Page 27; 38pp; English.
 XX XX The sequence is an oligonucleotide primer used to sequence nucleic acid
 CC molecules encoding Mycoplasma hyopneumoniae MHP3 antigen. MHP3 antigen
 CC and its fragments are useful in manufacturing a vaccine for treating or
 CC preventing a disease or disorder in an animal, especially pig, caused by
 CC M. hyopneumoniae infection e.g. enzootic mycoplasma pneumonia. The mhp3-
 CC encoded proteins may be used as immunogens to generate antibodies which
 CC immunospecifically bind such an immunogen. The antibodies generated
 CC against the antigen are useful in diagnostic immunoassays, passive
 CC immunotherapy and generation of anti-idiotypic antibodies. Mhp3 proteins
 CC may also be used in immunoassays, e.g. to detect or measure in a
 CC biological sample from a vaccinated or potentially infected test animal
 CC the presence of antibodies to the antigen, and thus to monitor the immune
 CC response and/or to diagnose infection of the animal

```
XX SQ Sequence 20 BP; 3 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3539 GCTTCTAGAGTTTATAG 3556
||||| |||||
Db 2 GCTTCTCAGTTTATAG 19

RESULT 1622
AAF74514
ID AAF74514 standard; DNA; 20 BP.
XX
AC AAF74514;
XX
DT 09-MAY-2001 (first entry)
XX
DE Clone 7520500 PRO9 forward PCR primer SEQ ID NO:111.
XX
KW Human; PRO; PROX; cytostatic; immunomodulatory; reproduction;
KW gene therapy; cell proliferation; differentiation disorder; cancer;
KW immune associated disorder; gestational disease; pre-clampsia;
KW PCR primer; sequencing primer; ss.
XX
OS Homo sapiens.
XX
PN WO200110902-A2.
XX
PD 15-FEB-2001.
XX
PF 11-AUG-2000; 2000WO-US021857.
XX
PR 11-AUG-1999; 99US-0148433P.
XX
PR 10-AUG-2000; 2000US-00635949.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Shinkets RA, Fernandes B;
XX
XX WPI; 2001-147509/15.
XX
XX Nucleic acids encoding secreted polypeptides, designated PROX
XX polypeptides, useful for treating a syndrome associated with a PROX-
XX associated disorder, e.g. cancer.
XX
XX Example 15; Page 144; 166pp; English.
XX
XX The present invention describes isolated nucleic acids encoding secreted
XX polypeptides, designated PROX polypeptides (i.e. a PRO polypeptide where
XX X is an integer from 1 to 17). PROX polypeptides have cytostatic,
XX immunomodulatory and reproduction activities, and can be used in gene
XX therapy, and as PROX antagonists and PROX agonists. PROX polypeptides,
XX nucleic acids and antibodies are useful in the manufacture of a
XX medicament for treating a syndrome associated with a PROX-associated
XX disorder, e.g. a cell proliferation and/or differentiation disorder (e.g.
XX cancer or immune associated disorders) and a gestational disease (e.g.
XX pre-clampsia). They are also used for screening for a modulator of
XX activity or of latency or predisposition to a PROX-associated disorder.
XX AAF74432 to AAF74448 encode the specifically claimed human PROX
XX polypeptides PRO1 to PRO17 given in AAB70531 to AAB70547. The present
XX sequence represents a primer used in an example from the present
XX invention
XX
XX SQ Sequence 20 BP; 1 A; 6 C; 5 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1495 GGCTGGACTACTCTTC 1512

Db 3 GGCTGGACTGCTTCTTC 20

RESULT 1623
AAF76793/C
ID AAF76793 standard; DNA; 20 BP.
XX
AC AAF76793;
XX
DT 17-MAY-2001 (first entry)
XX
DE Human cystatin C gene PCR primer #1206R.
XX
KW Human; cystatin C; age-related macular degeneration; CST3;
KW chromosome 20p11.2; polymorphism; B allele; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200116364-A2.
XX
PD 08-MAR-2001.
XX
PF 01-SEP-2000; 2000WO-EP008554.
XX
PR 01-SEP-1999; 99EP-00117198.
XX
PR 01-FEB-2000; 2000EP-00101921.
XX
PA (EVOT-) EVOTEC NEUROSCIENCES GMBH.
XX
PI Richard G, Nitsch R;
XX
XX WPI; 2001-235121/24.
XX
XX Diagnosing or prognosing age-related macular degeneration, in a subject
XX involves comparing activity and/or level of transcriptional or
XX translational product of Cystatin C gene in patient and control samples.
XX
XX Example 1; Page 30; 54pp; English.
XX
XX The present invention describes a method of diagnosing age-related
XX macular degeneration in an individual, involving comparing the level of
XX cystatin C activity compared to a known reference value of a diseased or
XX healthy individual. This is useful in identifying those at risk of and
XX suffering from age-related macular degeneration. The cystatin C gene is
XX found at human chromosome 20p11.2 and the B allele has been shown to be
XX indicative of an increased risk of the disease. The present sequence is a
XX PCR primer used to amplify the cystatin C gene (also known as CST3)
XX
XX SQ Sequence 20 BP; 3 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2940 TGGAGGGAGGCCCGG 2957
||||| |||||
Db 19 TGGTGGAGGCCCGCATGG 2

RESULT 1624
AAF91317/C
ID AAF91317 standard; DNA; 20 BP.
XX
AC AAF91317;
XX
DT 04-MAY-2001 (first entry)
XX
DE Human E2F transcription factor 1 antisense oligonucleotide #23.
XX
KW Antisense; E2F transcription factor 1; human; infection; inflammation;
KW tumour; ss.
XX
```

OS Homo sapiens.
 XX US6187587-B1.
 PN
 XX 13-FEB-2001.
 PD
 XX 02-MAR-2000; 2000US-00517584.
 PF
 XX 02-MAR-2000; 2000US-00517584.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Popoff I, Brown-Driver VL, Cowser LM;
 PI WPI; 2001-190981/19.
 XX
 DR Antisense compound capable of inhibiting the expression of E2F
 XX transcription factor 1, useful for preventing or delaying infection,
 PT inflammation or tumor formation.
 PT
 XX Example 15; Col 42; 40pp; English.
 PS
 XX The present invention relates to antisense compounds up to 30 nucleobases
 CC in length targeted to a E2F transcription factor 1. The invention is
 CC useful for inhibiting the expression of E2F transcription factor 1 in
 CC cells or tissues. The antisense oligonucleotides may also be used as a
 CC research agent and to prevent infection, inflammation or tumors
 CC
 XX Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 620 AGCCCCACATCCAGTGGC 637
 Db 18 AGAACCCACATCCAGTGGC 1
 RESULT 1625
 AAH75023/C
 ID AAH75023 standard; DNA; 20 BP.
 XX
 AC AAH75023;
 XX
 DT 29-OCT-2001 (first entry)
 XX
 DE PCR primer for human fibroblast growth factor 23 (FGF-23) cDNA.
 XX
 KW Fibroblast growth factor 23; FGF-23; injury; placental cell; ulcer;
 KW congenital defect; fertility; thymus; leukemia; lymphoma; injury;
 KW autoimmune disease; proliferative disorder; differentiation disorder;
 KW central nervous system disorder; Parkinson's disease; inflammation;
 KW Alzheimer's disease; Crohn's disease; intestinal wound; stroke;
 KW motility disorder; absorption disorder; intestinal malformation;
 KW ischemic vascular disease; myocardial ischemia; myocardial infarction;
 KW peripheral vascular disease; renal artery disease; skeletal myopathy;
 KW musculoskeletal disease; skeletal muscle cell; bone disease; arthritis;
 KW PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200166595-A2.
 XX
 PD 13-SEP-2001.
 XX
 PF 07-MAR-2001; 2001WO-US007468.
 XX
 PR 08-MAR-2000; 2000US-0187854P.
 PR 18-SEP-2000; 2000US-0233368P.
 PR 05-DEC-2000; 2000US-0251650P.
 XX
 PA (CHIR) CHIRON CORP.

PA (KYOU) UNIV KYOTO.
 XX
 PI Itoh N, Kavanaugh MW;
 XX
 DR WPI; 2001-522947/57.
 XX
 PT Isolated nucleic acids encoding the human and murine fibroblast growth
 factor 23, useful in the treatment of a condition characterized by
 PT inadequate function of placental cells (e.g. congenital defects) and the
 PT thymus (e.g. leukemia).
 XX
 PS Disclosure; Page 8; 77pp; English.
 XX
 CC PCR primers AAH75023-24 were used to amplify cDNA encoding human
 CC fibroblast growth factor 23 (FGF-23). The human FGF-23 polynucleotide and
 CC polypeptide are useful for treating a patient suffering from traumatic
 CC injury or a condition characterized by dysfunction of or injury to skin
 CC cells, a condition characterized by inadequate function of placental
 CC cells (e.g. congenital defects, fertility, or abnormal growth), a
 CC condition characterized by inadequate function of the thymus (e.g.
 CC leukemia, lymphoma, autoimmune disease, proliferative disorder of the
 CC thymus, or differentiation disorder of the thymus), or a condition
 CC characterized by central nervous system disorder (e.g. Parkinson's
 CC disease or Alzheimer's disease). The human FGF-23 polynucleotide and
 CC polypeptide are also useful in the treatment of Crohn's disease, healing
 CC of intestinal wounds, ulcers, inflammation, injuries and surgical
 CC anastomoses, motility and absorption disorders, and congenital
 CC malformations of the intestine. They are also useful for treating
 CC ischemic vascular diseases (e.g. myocardial ischemia/infarction,
 CC peripheral vascular disease, renal artery disease, stroke) and
 CC musculoskeletal disease characterized by loss of function, inadequate
 CC function or death of skeletal muscle cells, bone cells or supporting
 CC cells (e.g. skeletal myopathies, bone disease, or arthritis).
 XX
 SQ Sequence 20 BP; 7 A; 8 C; 4 G; 1 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 825 CTCTCGTGGCTGGTGGT 842
 Db 18 CTCTGAGTGGCTGGTCT 1
 RESULT 1626
 AAS20618
 ID AAS20618 standard; DNA; 20 BP.
 XX
 AC AAS20618;
 XX
 DT 23-APR-2002 (first entry)
 XX
 DE Human reverse PCR primer HMS1-26, used to amplify Sle1B region.
 XX
 KW Human; systemic lupus erythematosus 1B; SLE-1B; dermatological; ss;
 KW antiinflammatory; immunosuppressive; systemic autoimmune disorder;
 KW signalling lymphocyte activation molecule; SLAM; lymphocyte antigen 9;
 KW Ly-9; 2B4; natural killer cell receptor; CD48; CD84; LY108; CS1; DEDD;
 KW NIT1; upstream transcription factor 1; USF 1; GOLGA4; immune tolerance;
 KW PCR primer; HMS1-26.
 XX
 OS Homo sapiens.
 XX
 PN WO200182200-A2.
 XX
 PD 22-NOV-2001.
 XX
 PF 17-MAY-2001; 2001WO-US016051.
 XX
 PR 17-MAY-2000; 2000US-0204963P.
 PR 21-SEP-2000; 2000US-0234457P.
 XX

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PA (TEXA ) UNIV TEXAS SYSTEM.
XX
PI Wakeland EX, Wandstrat A, Morel L;
XX
DR WPI; 2002-066695/09.
XX
XX Screening for susceptibility to systemic autoimmune disorder by screening
PT for a mutation within the systemic lupus erythematosus-1B loci.
XX
PS Example 6; Page 67; 128pp; English.
XX
XX The present invention relates to a new method for screening for
CC susceptibility to a systemic autoimmune disorder. The method comprises
CC screening for at least one mutation within the systemic lupus
CC erythematosus (SLE)-1B loci. Screening for susceptibility to autoimmune
CC disorders such as systemic lupus erythematosus involves screening for at
CC least one mutation in a gene or genes with the SLE-1B loci such as a gene
CC encoding signalling lymphocyte activation molecule (SLAM), lymphocyte
CC antigen (Lyt)-9, 2B4 (a natural killer cell receptor), CD48, CD84, Lx108,
CC CS1, DEBD, NIT1, upstream transcription factor (USF)1, GOLGA4. The method
CC of the invention is useful for treating SLE and involves administering a
CC construct comprising a wild-type sequence encoding any one of the above
CC mentioned genes. Gene therapy also involves the use of antisense
CC constructs or ribozymes directed against the above mentioned genes for
CC treating SLE. The present nucleic acid sequence represents the human
CC reverse PCR primer HMS1-26 that was used in the invention with the human
CC forward PCR primer HMS1-26 (AAS20617) to amplify the human microsatellite
CC marker HMS1-26 (AAS20619) for the SLE1B region. HMS1-26 is also known as
CC HMS1-25R and HMS1-4R and is located between the Ly-9 and the 2b4 genes
XX
SQ Sequence 20 BP; 3 A; 1 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2325 GTGTGTGTGCGTGTGTGT 2342
DB 3 GGGTGTGTGTCATGTGTGT 20

RESULT 1627
ABK72530/C
ID ABK72530 standard; DNA; 20 BP.
XX
AC ABK72530;
XX
DT 13-AUG-2002 (first entry)
XX
DE HSC5 exon 7 PCR primer E7A.
XX
KW Nucleic acid base sequence analysis; DNA diagnosis; HSC5; PCR; primer;
KW ss.
XX
OS Unidentified.
XX
PN WO200233068-A1.
XX
PD 25-APR-2002.
XX
PF 18-OCT-2000; 2000WO-JP007244.
XX
PR 18-OCT-2000; 2000WO-JP007244.
XX
PA (CANO ) CANON KK.
XX
PI Yamamoto N, Okamoto T, Suzuki T;
XX
DR WPI; 2002-372310/40.
XX
PT Screening an unknown base sequence at a defined site of a target single-
PT stranded nucleic acid for use in DNA diagnosis and therapy, comprises a
PT DNA chip, fluorescence yield and pattern-based method.

Example 4; Page 17; 53pp; Japanese.

The present invention relates to a method of analysing an unknown nucleic
acid base sequence. The method comprises preparing a probe array,
hybridising with the probe array, measuring the fluorescence yield in the
reaction, obtaining a template pattern, producing a sample pattern, and
comparing the sample pattern with the template pattern. The method is
useful for specifying an unknown base sequence at a defined site of a
target single-stranded nucleic acid, which is useful for analysing a
nucleic acid base sequence. The method is applicable in DNA diagnosis and
therapy, and is useful in medicine and biology. Measuring the
fluorescence yield allows the detection of a one-base mismatch which can
be considered to produce high detection accuracy. The hybrid pattern of
the DNA probe is used so the difference in thermostability is less
important, and the judgement on each spot can be reliably carried out.
ABK72525-ABK72532 represent PCR primers used in the examples of the
present invention

SQ Sequence 20 BP; 3 A; 3 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2695 CCACCTTCCACCCCTGCC 2712
DB 19 CCACCTTCCACCCCTGCCAC 2

RESULT 1628
ABS77827/C
ID ABS77827 standard; DNA; 20 BP.
XX
AC ABS77827;
XX
DT 13-DEC-2002 (first entry)
XX
DE Angiogenesis inhibitory oligonucleotide #311.
XX
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubecosis; Osler-Webber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophilic joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.
XX
OS Synthetic.
XX
PN WO200253141-A2.
XX
PD 11-JUL-2002.
XX
PF 14-DEC-2001; 2001WO-US048458.
XX
PR 14-DEC-2000; 2000US-0255534P.
XX
PA (COLE-) COLEY PHARM GROUP INC.
XX
PI Bratzler RL;
XX
DR WPI; 2002-566690/60.
XX
PT Inhibiting angiogenesis in a subject, involves administering at least one
PT antiangiogenic nucleic acid molecule to the subject.
XX
XX Claim 2; Page 25; 276pp; English.
XX
PT The invention relates to inhibiting angiogenesis in a subject, comprising
PT administering at least one antiangiogenic nucleic acid molecule. Also
PT included is a kit comprising a first container housing the antiangiogenic

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CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubecosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1678 GACTTCGGCTGGCCCGG 1695
 Db 20 GACTTTGGCTGGCCCGG 3

RESULT 1629
 ABL39057/c
 ID ABL39057 standard; DNA; 20 BP.
 XX
 AC ABL39057;
 XX
 DT 16-APR-2002 (first entry)
 XX
 DE Immunostimulatory nucleic acid SEQ ID NO: 463.
 XX
 KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
 KW angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone"
 XX
 PN WO200197843-A2.
 XX
 PD 27-DEC-2001.
 XX
 PF 22-JUN-2001; 2001WO-US020154.
 XX
 PR 22-JUN-2000; 2000US-0213346P.
 XX
 PA (IOWA) UNIV IOWA RES FOUND.
 XX
 PI Weiner G, Hartmann G;
 XX
 DR WPI; 2002-154611/20.
 XX
 PT Treating or preventing cancer, such as basal cell carcinoma, comprises
 PT administering immunostimulatory nucleic acids that induce expression of
 PT cell surface antigens and antibodies to a subject having or at risk of
 PT developing cancer.
 XX
 PS Disclosure; Page 212; 312pp; English.
 XX

CC The present invention relates to methods for treating or preventing
 CC cancer, involving administering to a subject having or at risk of
 CC developing cancer immunostimulatory nucleic acids that induce expression
 CC of cell surface antigens and antibodies. The methods are useful for
 CC treating or preventing cancer such as basal cell carcinoma, bladder
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 CC breast cancer, cervical cancer, colon and rectum cancer, connective
 CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx

CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 CC present sequence is an immunostimulatory oligonucleotide described in the
 CC exemplification of the invention
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1678 GACTTCGGCTGGCCCGG 1695
 Db 20 GACTTTGGCTGGCCCGG 3

RESULT 1630
 ABK49044
 ID ABK49044 standard; DNA; 20 BP.
 XX
 AC ABK49044;
 XX
 DT 02-JUL-2002 (first entry)
 XX
 DE PCR primer #1, used to amplify G4003 HindIII marker sequence.
 XX
 KW Rice; fertility recovery gene; Rf-1 gene; RFLP marker; S12564; C1381;
 KW restriction fragment length polymorphism; chromosome 10; hybrid plant;
 KW rice BT type male fertility cytoplasm; G4003; PCR; primer; ss.
 XX
 OS Synthetic.
 XX
 PN WO200214506-A1.
 XX
 PD 21-FEB-2002.
 XX
 PF 16-AUG-2001; 2001WO-JP007052.
 XX
 PR 17-AUG-2000; 2000JP-00247204.
 XX
 PA (NISH) JAPAN TOBACCO INC.
 PA (SYGN) SYNGENTA LTD.
 XX
 PI Komori T, Yamamoto T, Nitta N, Takemori N;
 XX
 DR WPI; 2002-280759/32.
 XX

PT Estimating genotype of fertility recovery locus to rice BT type male
 PT fertility cytoplasm comprises detection of fertility recovery gene,
 PT useful in growing hybrid rice plants.
 XX
 PS Claim 2; Page 31; 47pp; Japanese.
 XX

CC The present invention relates to a new method of identifying rice
 CC individual or seed, for examination, which may contain a fertility
 CC recovery gene (Rf-1 gene). The method of the invention involves using the
 CC Rf-1 gene locus located between the RFLP (restriction fragment length
 CC polymorphism) markers loci S12564 and C1381 existing on the rice 10th
 CC chromosome. The method can be used for estimating the genotype of
 CC fertility recovery locus to rice BT type male fertility cytoplasm by
 CC detection of fertility recovery gene, which is useful in growing hybrid
 CC rice plants. Plural PCR marker loci located around and linked to the Rf-1
 CC gene are developed and the relationship is defined. Therefore, the
 CC presence or absence of the Rf-1 gene can be examined, and an Rf-1 gene
 CC homo-individual is selected conveniently and exactly by calibrating the
 CC genotypes of plural PCR marker loci. The present nucleic acid sequence
 CC represents PCR primer #1 that was used in the methods of the invention to
 CC amplify the G4003 HindIII marker sequence for use in detecting rice Rf-1
 CC gene, as described above
 XX

SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

```

Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2044 ACCGACGAGTACCTGGAC 2061
DB 2 ATCGACGAGTACCTGAAC 19

RESULT 1631
ABL43528/C
ID ABL43528 standard; DNA; 20 BP.
XX AC ABL43528;
XX DT 11-APR-2002 (first entry)
XX DE Human chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
XX KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
XX KW PCR primer; ss.
XX OS Homo sapiens.
XX PN JP2001321190-A.
XX PD 20-NOV-2001.
XX PF 12-MAR-2001; 2001JP-00068285.
XX PR 10-MAR-2000; 2000JP-00066716.
XX PA (RIKA ) RIKAGAKU KENKYUSHO.
XX PA (GENO-) GENOTEX YG.
XX DR WPI; 2002-144136/19.
XX PT Arraying genome clones.
XX PS Claim 4; Page 16; 528pp; Japanese.
CC The present invention describes a method of arraying genome clones. The
CC method comprises: (a) clones of the genomic libraries contained in
CC multiwell plates numbered for discrimination are mixed in each of the
CC multiwell plates; (b) a primer designed based on the chromosome marker
CC sequence is added to the mixture to carry out an amplification reaction;
CC (c) a signal corresponding to the marker is detected from the resultant
CC amplified product to specify the discrimination Nos. of the multiwell
CC plates containing the clones having said marker sequence; (d) the order
CC of the markers is changed so that the same discrimination Nos. succeed to
CC the maximum in the specified discrimination Nos. to array the multiwell
CC plates; (e) the clones in the multiwell plates of the specified
CC discrimination Nos. are mixed respectively in each wells of longitudinal
CC and lateral directions; (f) the mixed clones are cultured and the
CC resultant cultures are amplified by using the above primer; (g) signals
CC are detected from the amplified products; (h) the clones in the multiwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstituted as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX Sequence 20 BP; 3 A; 2 C; 8 G; 7 T; 0 U; 0 Other;
QY Query Match      0.4%; Score 14.8; DB 1; Length 20;
DB Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 999 CCCACCGTCGACCAAGAT 1016
DB 20 CCACACCATGCAAGAT 3

RESULT 1632
AAL50647
ID AAL50647 standard; DNA; 20 BP.
XX AC AAL50647;
XX DT 16-JAN-2003 (first entry)
XX DE Mycoplasma hyopneumoniae mhp3 PCR primer #13.
XX KW PCR; primer; mhp3; apoprotein antigen; enzootic mycoplasmal pneumonia;
XX KW vaccine; Mycoplasma hyopneumoniae infection; ss.
XX OS Mycoplasma hyopneumoniae.
XX PN EP1245677-A1.
XX PD 02-OCT-2002.
XX PF 30-MAR-2001; 2001EP-00303030.
XX PR 30-MAR-2001; 2001EP-00303030.
XX PA (PFIZ ) PFIZER PROD INC.
XX PI King KW, Madura RA, Rosey EL;
XX DR WPI; 2002-742716/81.
XX PT Novel apoprotein antigens encoded by Mycoplasma hyopneumoniae for use in
XX PT vaccines to prevent and treat diseases caused by infection with
XX PT Mycoplasma hyopneumoniae in animals, especially pigs.
XX PS Example; Page 26; 38pp; English.
CC The invention comprises the amino acid and coding sequences of Mycoplasma
CC hyopneumoniae mhp3 proteins, the invention also comprises novel
CC apoprotein antigens encoded by the M. hyopneumoniae mhp3 gene. M.
CC hyopneumoniae is a bacterial pathogen that causes enzootic mycoplasmal
CC pneumonia in pigs. The mhp3 genes, proteins and apoprotein antigens of
CC the invention are useful in the manufacture of a vaccine for treating/
CC preventing a disease or disorder caused by infection with M.
CC hyopneumoniae in an animal, especially a pig. The present DNA sequence
CC represents a PCR primer for the Mycoplasma hyopneumoniae mhp3 gene
XX Sequence 20 BP; 3 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
QY Query Match      0.4%; Score 14.8; DB 1; Length 20;
DB Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3539 GCTTCTAGAGTTTATAG 3556
DB 2 GCTTCTAGAGTTTATAG 19

RESULT 1633
ABZ30628/C
ID ABZ30628 standard; DNA; 20 BP.
XX AC ABZ30628;
XX DT 30-JAN-2003 (first entry)
XX DE Candida albicans GRACE strain PCR primer SEQ ID NO 4779.
XX KW Fungus; yeast; tetracycline; promoter; GRACE strain; biosynthesis;
XX KW signal transduction; DNA replication; cell division; growth;
XX KW proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.
XX OS Candida albicans.

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FH Key      Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate linkage"
FT modified_base 1
FT /tag= b
FT /mod_base= OTHER
FT /note= "azasugar-containing adenosine derivative"
FT modified_base 7
FT /tag= c
FT /mod_base= OTHER
FT /note= "azasugar-containing adenosine derivative"
FT modified_base 13
FT /tag= d
FT /mod_base= OTHER
FT /note= "azasugar-containing adenosine derivative"
FT modified_base 19
FT /tag= e
FT /mod_base= OTHER
FT /note= "azasugar-containing adenosine derivative"
XX
XX WO200268582-A2.
XX
XX 06-SEP-2002.
XX
XX 27-FEB-2002; 2002WO-KR000325.
XX
XX 27-FEB-2001; 2001KR-00009914.
XX
XX (DONG-) DONGBU HANNONG CHEM CO LTD.
XX
XX Bae Y, Lee D, Lim H, Kim S, Lee K, Jung K;
XX WPI; 2002-750412/81.
XX
XX New phosphorothioate oligonucleotides useful in the treatment of AIDS.
XX
XX Claim 3; Page 41; 120pp; English.
XX
XX The present sequence is that of a phosphorothioate oligonucleotide of
XX random sequence which includes 4 six-membered azasugar nucleotide
XX derivatives. It is a claimed example of oligonucleotides of the invention
XX (see ABV73816-41) that have been tested as AIDS therapeutic agents. In
XX anti-HIV-1 assays, the oligonucleotide showed higher antiviral activity
XX than AZT, ddC and ddI, and antiviral activity was resistant to the
XX effects of serum. Claimed oligonucleotides of the present invention have
XX low toxicity against cells, are membrane permeable, working outside of
XX cells to inhibit viral attachment of HIV, have a wide antiviral activity
XX against a broad spectrum of HIV variants, are not active against other
XX viruses including HIV. The resistance of the present oligonucleotide to
XX serum allows its use as an AIDS therapeutic drug in vivo
XX
XX Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 1.7e+03;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2104 ACCCCAGCTCCAGCTCC 2121
XX | | | | | | | | | |
XX Db 1 AGCTCCAGCTCCAGCTCC 18
XX
XX RESULT 1636
XX ABI93758/c
XX ID ABI93758 standard; DNA; 20 BP.
XX
XX AC ABI93758;
XX
XX DT 16-FEB-2002 (first entry)
XX
XX Capture oligonucleotide zip ID#845 oligo #9.

```

```

XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
XX ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
XX infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
XX oncogene; tumour suppressor; human papillomavirus; forensic;
XX environmental monitoring; food industry; feed industry; ss.
XX Synthetic.
XX OS
XX WO200179548-A2.
XX
XX 25-OCT-2001.
XX
XX 04-APR-2001; 2001WO-US010958.
XX
XX 14-APR-2000; 2000US-0197271P.
XX
XX (CORR ) CORNELL RES FOUND INC.
XX
XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX WPI; 2002-034366/04.
XX
XX Designing capture oligonucleotide probes for use on a support to which
XX complementary oligonucleotides hybridize with little mismatch.
XX
XX Example 5; Fig 29; 300pp; English.
XX
XX The present invention describes a method (M1) for designing capture
XX oligonucleotide probes (I) for use on a support to which complementary
XX oligonucleotide probes (II) will hybridize with little mismatch, where
XX (i) have melting temperatures within a narrow range. The method is useful
XX for detecting infectious diseases caused by bacterial infectious agents
XX e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
XX infectious agents e.g. Cryptococcus neoformans, Candida albicans and
XX Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
XX Epstein-Barr virus and polio virus, and parasitic infectious agents
XX selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
XX medinensis. The method is also useful for detecting genetic diseases such
XX as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
XX
XX Detecting cancer involving oncogenes, tumour suppressor genes, or genes
XX involved in DNA amplification, replication, recombination or repair, the
XX cancer is specifically associated with a gene selected from BRCA1 gene,
XX p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
XX method is also used for environmental monitoring, forensics and the food
XX and feed industry, detecting comprises scanning (using e.g. a scanning
XX electron microscope and infrared microscope) the support at the
XX particular sites and identifying if ligation of the oligonucleotide probe
XX sets occurred and correlating (using a computer) identified ligation to a
XX presence or absence of the target nucleotide sequences. ABI82074 to
XX ABI97546 represent oligonucleotide sequences used in the exemplification
XX of the present invention
XX
XX Sequence 20 BP; 2 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 1.7e+03;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 366 CGAGCACCCGATTCGAGG 383
XX | | | | | | | | | |
XX Db 19 CGAGCACCCGATTCGAGG 2
XX
XX RESULT 1637
XX ABI96621
XX ID ABI96621 standard; DNA; 20 BP.
XX
XX AC ABI96621;
XX
XX DT 16-FEB-2002 (first entry)
XX
XX Capture oligonucleotide zip ID#3708 oligo #9.

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```

XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX Synthetic.
XX WO200179548-A2.
XX PN
XX PD
XX 25-OCT-2001.
XX 04-APR-2001; 2001WO-US010958.
XX PF
XX PR
XX 14-APR-2000; 2000US-0197271P.
XX PA
XX (CORR ) CORNELL RES FOUND INC.
XX PI
XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX WPI; 2002-034366/04.
XX DR
XX Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX PS
XX Example 5; Fig 29; 300pp; English.
XX CC
XX The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridize with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinensis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. ABI82074 to
CC ABI97546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX SQ
XX Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
XX Query Match 0.4%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 1.7e+03;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 100 TGCAGCGACGGCTCAG 117
DB 3 TGACGGCAGCGCTCAG 20
XX
XX RESULT 1638
XX ABI97545/C
XX ID ABI97545 standard; DNA; 20 BP.
XX AC
XX ABI97545;
XX 16-FEB-2002 (first entry)
XX DT
XX Capture oligonucleotide Zip ID#2832 oligo #9.
XX DE

XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX Synthetic.
XX WO200179548-A2.
XX PN
XX PD
XX 25-OCT-2001.
XX 04-APR-2001; 2001WO-US010958.
XX PF
XX PR
XX 14-APR-2000; 2000US-0197271P.
XX PA
XX (CORR ) CORNELL RES FOUND INC.
XX PI
XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX WPI; 2002-034366/04.
XX DR
XX Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX PS
XX Example 5; Fig 29; 300pp; English.
XX CC
XX The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridize with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinensis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. ABI82074 to
CC ABI97546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX SQ
XX Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;
XX Query Match 0.4%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 1.7e+03;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 471 CAAAGTTTGGCAGCATCCG 488
DB 20 CAAAGTTGGCACCACATCCG 3
XX
XX RESULT 1639
XX ABI95630
XX ID ABI95630 standard; DNA; 20 BP.
XX AC
XX ABI95630;
XX 16-FEB-2002 (first entry)
XX DT
XX Capture oligonucleotide Zip ID#2717 oligo #9.
XX DE

```

```

XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX Synthetic.
XX WO200179548-A2.
XX 25-OCT-2001.
XX 04-APR-2001; 2001WO-US010958.
XX 14-APR-2000; 2000US-0197271P.
XX (CORR ) CORNELL RES FOUND INC.
XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX WPI; 2002-034366/04.
XX Designing capture oligonucleotide probes for use on a support to which
XX complementary oligonucleotides hybridize with little mismatch.
XX Example 5; Fig 29; 300pp; English.
XX The present invention describes a method (M1) for designing capture
XX oligonucleotide probes (I) for use on a support to which complementary
XX oligonucleotide probes (II) will hybridize with little mismatch, where
XX (I) have melting temperatures within a narrow range. The method is useful
XX for detecting infectious diseases caused by bacterial infectious agents
XX e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
XX infectious agents e.g. Cryptococcus neoformans, Candida albicans and
XX Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
XX Epstein-Barr virus and polio virus, and parasitic infectious agents
XX selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
XX medinensis. The method is also useful for detecting genetic diseases such
XX as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
XX Detecting cancer involving oncogenes, tumour suppressor genes, or genes
XX involved in DNA amplification, replication, recombination or repair, the
XX cancer is specifically associated with a gene selected from BRCA1 gene,
XX p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
XX method is also used for environmental monitoring, forensics and the food
XX and feed industry, detecting comprises scanning (using e.g. a scanning
XX electron microscope and infrared microscope) the support at the
XX particular sites and identifying if ligation of the oligonucleotide probe
XX sets occurred and correlating (using a computer) identified ligation to a
XX presence or absence of the target nucleotide sequences. ABI82074 to
XX ABI97546 represent oligonucleotide sequences used in the exemplification
XX of the present invention
XX Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
QY 120 GCGGTAAGTGTGCACCTT 137
DB 2 GCGGTAAGTGTGCACCTT 19
RESULT 1640
ABI97200
ID ABI97200 standard; DNA; 20 BP.
XX AC ABI97200;
XX DT 16-FEB-2002 (first entry)
XX DE Capture oligonucleotide Zip ID#4287 oligo #9.

```

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XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX Synthetic.
XX WO200179548-A2.
XX 25-OCT-2001.
XX 04-APR-2001; 2001WO-US010958.
XX 14-APR-2000; 2000US-0197271P.
XX (CORR ) CORNELL RES FOUND INC.
XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX WPI; 2002-034366/04.
XX Designing capture oligonucleotide probes for use on a support to which
XX complementary oligonucleotides hybridize with little mismatch.
XX Example 5; Fig 29; 300pp; English.
XX The present invention describes a method (M1) for designing capture
XX oligonucleotide probes (I) for use on a support to which complementary
XX oligonucleotide probes (II) will hybridize with little mismatch, where
XX (I) have melting temperatures within a narrow range. The method is useful
XX for detecting infectious diseases caused by bacterial infectious agents
XX e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
XX infectious agents e.g. Cryptococcus neoformans, Candida albicans and
XX Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
XX Epstein-Barr virus and polio virus, and parasitic infectious agents
XX selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
XX medinensis. The method is also useful for detecting genetic diseases such
XX as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
XX Detecting cancer involving oncogenes, tumour suppressor genes, or genes
XX involved in DNA amplification, replication, recombination or repair, the
XX cancer is specifically associated with a gene selected from BRCA1 gene,
XX p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
XX method is also used for environmental monitoring, forensics and the food
XX and feed industry, detecting comprises scanning (using e.g. a scanning
XX electron microscope and infrared microscope) the support at the
XX particular sites and identifying if ligation of the oligonucleotide probe
XX sets occurred and correlating (using a computer) identified ligation to a
XX presence or absence of the target nucleotide sequences. ABI82074 to
XX ABI97546 represent oligonucleotide sequences used in the exemplification
XX of the present invention
XX Sequence 20 BP; 5 A; 6 C; 7 G; 2 T; 0 U; 0 Other;
QY 1692 CCGGACGTGTGCACCTT 1709
DB 2 CCGGACGTGTGCACCTT 19
RESULT 1641
ACF30914
ID ACF30914 standard; DNA; 20 BP.
XX AC ACF30914;
XX DT 22-SEP-2003 (first entry)
XX DE Rice chromosome 10 RFLP marker G4003 HindIII PCR primer, SEQ ID NO:3.

```

XX Rice; plant; fertility; control; restoration; cytoplasmic male sterility;
 KW BT; fertility restorer; Rf-1; chromosome 10; marker; RTIP;
 KW restriction fragment length polymorphism; PCR; primer; ss.
 XX
 OS Oryza sativa.
 XX
 PN WO2003027290-A1.
 XX
 PD 03-APR-2003.
 XX
 PF 13-SEP-2002; 2002WO-JP009429.
 XX
 PR 19-SEP-2001; 2001JP-00285247.
 PR
 PR 04-OCT-2001; 2001JP-00309135.
 PR
 PR 26-JUN-2002; 2002JP-00185709.
 XX
 XX (NISB) JAPAN TOBACCO INC.
 PA (SYGN) SYNGENTA LTD.
 PA
 XX Komori T, Ota S, Murai N, Hisei Y;
 XX
 XX WPI; 2003-313641/30.
 DR
 XX
 XX Fragment of rice Rf-1 gene for restoration to and control of fertility in
 XX rice with BT male cytoplasmic sterility.
 XX
 XX Example; Page 96; 200pp; Japanese.
 PS
 XX The invention relates to the restoration to and control of fertility in
 CC rice with BT cytoplasmic male sterility. The invention involves
 CC transforming rice with a nucleic acid containing all or part of the
 CC fertility restorer gene (Rf-1) derived from rice cultivar IR24
 CC (ACF30938), or a sequence at least 70% homologous to it which encodes a
 CC protein with similar activity. The Rf-1 gene is located on chromosome 10,
 CC and was analysed using RFLP (restriction fragment length polymorphism)
 CC and PCR to determine markers. The Rf-1 gene product is thought to be
 CC responsible for reducing the abnormal transcription of the
 CC mitochondrially-encoded atp6 gene which is thought to be responsible for
 CC cytoplasmic male sterility. The invention also encompasses a method of
 CC determining the presence of the Rf-1 gene in a rice genome, using
 CC suitable primers to amplify from the rice genome a marker consisting of
 CC the P4497 MboI-B56691 XbaI fragment of rice chromosome 10, and nucleic
 CC acids containing residues 38538-54123 or 42132-48883 of Rf-1 gene derived
 CC from rice IR24. The Rf-1 gene, fragments of the Rf-1 gene containing
 CC nucleotides 38538-54123 or 42132-48883, and homologous sequences may be
 CC used to control and/or restore fertility in rice having BT cytoplasmic
 CC male sterility. Sequences ACF30912-ACF30929 and ACF30940-ACF30979
 CC represent PCR primers used in the analysis of rice chromosome 10 in an
 CC example from the invention
 XX
 SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2044 ACCGACGAGTACTCTGGAC 2061
 Db 2 ATCGACGAGTACTCTGAAC 19
 |||||
 |||||
 RESULT 1642
 ABX70535
 ID ABX70535 standard; DNA; 20 BP.
 AC ABX70535;
 XX
 XX 03-MAR-2003 (first entry)
 DT
 XX PCR primer #2 for DNA encoding human NOV19a.
 DE
 XX Human; NOVX; G-protein coupled receptor; GPCR; cancer; cytostatic;
 KW

KW real time quantitative PCR; RTQ PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200279398-A2.
 XX
 PD 10-OCT-2002.
 XX
 PF 08-MAR-2002; 2002WO-US007355.
 XX
 PR 08-MAR-2001; 2001US-0274194P.
 PR
 PR 08-MAR-2001; 2001US-0274281P.
 PR
 PR 08-MAR-2001; 2001US-0274322P.
 PR
 PR 09-MAR-2001; 2001US-0274849P.
 PR
 PR 13-MAR-2001; 2001US-0275578P.
 PR
 PR 13-MAR-2001; 2001US-0275579P.
 PR
 PR 13-MAR-2001; 2001US-0275601P.
 PR
 PR 14-MAR-2001; 2001US-0276000P.
 PR
 PR 16-MAR-2001; 2001US-0276776P.
 PR
 PR 19-MAR-2001; 2001US-0276994P.
 PR
 PR 20-MAR-2001; 2001US-0277239P.
 PR
 PR 20-MAR-2001; 2001US-0277327P.
 PR
 PR 20-MAR-2001; 2001US-0277338P.
 PR
 PR 21-MAR-2001; 2001US-0277791P.
 PR
 PR 22-MAR-2001; 2001US-0277833P.
 PR
 PR 23-MAR-2001; 2001US-0278152P.
 PR
 PR 26-MAR-2001; 2001US-0278894P.
 PR
 PR 27-MAR-2001; 2001US-0278999P.
 PR
 PR 27-MAR-2001; 2001US-0279036P.
 PR
 PR 30-MAR-2001; 2001US-0280233P.
 PR
 PR 02-APR-2001; 2001US-0280802P.
 PR
 PR 02-MAY-2001; 2001US-0288052P.
 PR
 PR 02-MAY-2001; 2001US-0288066P.
 PR
 PR 02-MAY-2001; 2001US-0288228P.
 PR
 PR 17-MAY-2001; 2001US-0291768P.
 PR
 PR 07-JUN-2001; 2001US-0296693P.
 PR
 PR 08-JUN-2001; 2001US-0296856P.
 PR
 PR 05-JUL-2001; 2001US-0303230P.
 PR
 PR 05-JUL-2001; 2001US-0303237P.
 PR
 PR 08-AUG-2001; 2001US-0310913P.
 PR
 PR 13-AUG-2001; 2001US-0311978P.
 PR
 PR 14-AUG-2001; 2001US-0312191P.
 PR
 PR 16-AUG-2001; 2001US-0312916P.
 PR
 PR 17-AUG-2001; 2001US-0313182P.
 PR
 PR 20-AUG-2001; 2001US-0313626P.
 PR
 PR 21-AUG-2001; 2001US-0314018P.
 PR
 PR 27-AUG-2001; 2001US-0315227P.
 PR
 PR 10-SEP-2001; 2001US-0318403P.
 PR
 PR 10-SEP-2001; 2001US-0318510P.
 PR
 PR 14-SEP-2001; 2001US-0322296P.
 PR
 PR 14-SEP-2001; 2001US-0322360P.
 PR
 PR 27-SEP-2001; 2001US-0325378P.
 PR
 PR 09-NOV-2001; 2001US-0332486P.
 PR
 PR 09-NOV-2001; 2001US-0345399P.
 PR
 PR 07-MAR-2002; 2002US-00094886.
 XX
 XX (CURA-) CURAGEN CORP.
 XX
 PI Kekuda R, Tchernev VT, Liu X, Spytek KA, Patturajan M;
 PI Burgess CE, Vernet CAM, Li L, Gorman L, Malyankar UM, Boldog FL;
 PI Guo X, Shenoy SG, Padigaru M, Taupier RJ, Miller CE, Casman SJ;
 PI Pena CE, Gangolli EA, Gusev V, Smithson G, Zerhusen BD, Gerlach V;
 PI Pochart PF, Fernandes ER, Shimkets RA, Rastelli L, Spaderna SK;
 PI Larochelle WJ, Zhong M, Khrantsov NV, Voss EZ, Herrmann JL;
 XX
 XX WPI; 2003-058423/05.
 DR
 XX NOVX polypeptides and polynucleotides, useful for treating a syndrome
 XX related to a human disease associated with the NOVX polypeptide e.g.,
 PT cancer.
 PT
 PS Example 47; Page 312; 413pp; English.
 XX

CC The present invention relates to the isolation of novel human
CC polypeptides referred to as NOVX (NOV1-NOV44), variants of these
CC proteins, and the polynucleotide sequences encoding them. The NOVX
CC proteins of the invention are G-protein coupled receptor (GPCR) related
CC proteins. The sequences of the invention are useful in the manufacture of
CC a medicament for treating a syndrome related to a human disease
CC associated with the polypeptides e.g. cancer. The present sequence
CC represents a PCR primer used in a real time quantitative (RTQ) PCR
CC reaction for DNA encoding a human NOVX protein
XX
SQ Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2008 GTGGAGGACCTGGACCGT 2025
Db 3 GAGGAGGACCTGGACAGT 20

RESULT 1643
ACA61357/c
ID ACA61357 standard; DNA; 20 BP.
XX
XX ACA61357;
AC
XX
DT 11-AUG-2003 (first entry)
XX
DE Human c-raf mRNA antisense oligonucleotide #5.
XX
KW Human; c-raf; antisense; ss; nuclease inhibitor; gene therapy; AIDS;
KW bacterial infection; viral infection; protozoan infection;
KW abnormal cell proliferation; tumour formation; atherosclerosis.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate backbone. Optionally 1-
FT 12 are 2'-O-methyl nucleotides"
XX
XX US2003004325-A1.
XX
XX 02-JAN-2003.
XX
XX 28-NOV-2001; 2001US-00996263.
XX
XX 11-JAN-1990; 90US-00463358.
XX 13-AUG-1990; 90US-00566977.
XX 11-JAN-1991; 91WO-US000243.
XX 24-DEC-1991; 91WO-US005720.
XX 12-AUG-1991; 91US-00814961.
XX 05-MAR-1992; 92US-00835932.
XX 01-JUL-1992; 92US-00854634.
XX 23-DEC-1992; 92WO-US011339.
XX 21-JUN-1994; 94US-00244993.
XX 06-JUN-1995; 95US-00471973.
XX 17-AUG-1998; 98US-00135202.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cook PD, Kawasaki AM;
XX
XX WPI; 2003-438873/41.
XX
XX New nuclease resistant compounds, useful as therapeutics, diagnostic
XX agents, or research reagents, or for treating an organism with a disease
XX associated with the undesired production of a protein, e.g. bacterial
XX infections or AIDS.
PT

XX
PS Example 31; Page 29; 50pp; English.
XX
CC The invention relates to a nuclease resistant compound that hybridises
CC with RNA or DNA, comprising covalently-bound nucleosides that
CC individually include a ribose of deoxyribose sugar portion and a base
CC portion. The nuclease resistant compounds are useful as therapeutics,
CC diagnostic agents, or research reagents. The compounds are also useful
CC for modulating the activity of an RNA or DNA molecule, or for treating an
CC organism with a disease associated with the undesired production of a
CC protein, e.g. bacterial, viral or protozoan infections, AIDS, abnormal
CC cell proliferation and tumour formation, or atherosclerosis. The present
CC sequence represents the human c-raf mRNA antisense oligonucleotide #5
XX
SQ Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 844 CTGCCAGCGGAGGAGGAG 861
Db 20 CTGCCAGCGGAGGAGGAG 3

RESULT 1644
ACC86802
ID ACC86802 standard; DNA; 20 BP.
XX
XX ACC86802;
AC
XX
DT 04-AUG-2003 (first entry)
XX
DE Human VEGFR-1 chimeric phosphorothioate oligonucleotide SEQ ID NO:97.
XX
KW Vascular endothelial growth factor receptor 1; VEGF receptor; VEGFR;
KW inhibitor; cytostatic; antirheumatic; antiarthritic; antiangiogenic;
KW antiinflammatory; antisense gene therapy; hyperproliferative disorder;
KW cancer; rheumatoid arthritis; angiogenesis; infection; inflammation;
KW tumour formation; phosphorothioate; 2'-O-methoxyethyl; 2'-MOE; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-O-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 5 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX
XX WO2003022227-A2.
XX
XX 20-MAR-2003.
XX
XX 12-SEP-2002; 2002WO-US029148.
XX
XX 13-SEP-2001; 2001US-00953318.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Watt AT;
XX
XX WPI; 2003-301004/29.
XX
XX New antisense oligonucleotide targeted to a nucleic acid encoding
XX vascular endothelial growth factor receptor-1, useful for diagnosing or
XX treating cancer, rheumatoid arthritis, or diseases or conditions
XX involving angiogenesis.
XX
XX Claim 3; Page 84; 150pp; English.
PS

XX The present invention describes a compound (C) 8-50 nucleobases in length
 CC targeted to a nucleic acid molecule encoding vascular endothelial growth
 CC factor receptor-1 (VEGFR-1), where the compound inhibits the expression
 CC of VEGFR-1 and specifically hybridizes with the nucleic acid encoding
 CC VEGFR-1 or with an 8-nucleobase portion of an active site on the nucleic
 CC acid molecule encoding VEGFR-1. Also described: (1) a composition
 CC comprising (C) and a carrier or diluent; (2) inhibiting the expression of
 CC VEGFR-1 in cells or tissues by contacting the cells or tissues with (C)
 CC so that the expression of VEGFR-1 is inhibited; and (3) treating an
 CC animal having a disease or condition associated with VEGFR-1 by
 CC administering (C) to the animal so that the expression of VEGFR-1 is
 CC inhibited. (C) has antiangiogenic, antirheumatic, antiarthritic,
 CC cytostatic and antiinflammatory activities, and can be used in antisense
 CC gene therapy. The antisense compounds are useful for modulating the
 CC expression of VEGFR-1 and for treating diseases or conditions associated
 CC with the expression of VEGFR-1, such as hyperproliferative disorders
 CC (e.g. cancer), rheumatoid arthritis, or diseases or conditions involving
 CC angiogenesis. The antisense compounds are also useful for diagnostics,
 CC therapeutics, prophylaxis, e.g. to prevent or delay infection,
 CC inflammation or tumour formation, as research reagents and kits, and in
 CC distinguishing between functions of various members of a biological
 CC pathway. The present sequence represents a human VEGFR-2 chimeric
 CC phosphorothioate antisense oligonucleotide, which is used in an example
 CC from the present invention
 XX
 SQ Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1352 TGGAGATGATGAGATGA 1369
 Db 1 TGGTATGATGAGATGA 18
 RESULT 1645
 ADA26589
 ID ADA26589 standard; DNA; 20 BP.
 XX
 AC ADA26589;
 DT 20-NOV-2003 (first entry)
 XX
 DE Human JNK2 sense control oligonucleotide ISIS12560.
 XX
 KW ss; human; Jun N-terminal kinase; JNK1; JNK2; JNK3; cytostatic;
 KW antiinflammatory; apoptosis; prostate cancer; prostate tumour;
 KW inflammation; fibrosis; fibrotic disease; fibrotic scarring;
 KW peritoneal adhesion; lung fibrosis; conjunctival scarring;
 KW hyperproliferative disease; cancer; probe.
 XX
 OS Homo sapiens.
 XX
 PN US2003004120-A1.
 XX
 PD 02-JAN-2003.
 XX
 PF 31-JAN-2001; 2001US-00774809.
 XX
 PR 13-AUG-1997; 97US-00910629.
 PR 07-AUG-1998; 98US-00130616.
 PR 07-APR-1999; 99US-00287796.
 PR 15-SEP-1999; 99US-00396902.
 XX
 PA (MCKA/) MCKAY R.
 PA (DEAN/) DEAN N M.
 PA (MONI/) MONIA B P.
 PA (NERO/) NERO P.
 PA (GAAR/) GAARDE W A.
 XX
 FI Mckay R., Dean NM, Monia BP, Nero P, Gaarde WA;

XX WPI; 2003-311908/30.
 DR
 XX New oligonucleotides which hybridizes to, and modulates the expression of
 PT Jun N-terminal kinase, useful for treating a disease or condition
 PT characterized by a reduction in apoptosis, e.g. prostate cancer,
 PT inflammation or fibrosis.
 XX
 PS Example 4; Page 26; 69pp; English.
 XX
 CC The invention relates to an oligonucleotide (antisense, AS) comprising 8-
 CC 30 nucleotides connected by covalent linkages, where the oligonucleotide
 CC has a sequence specifically hybridisable with a nucleic acid encoding a
 CC Jun N-terminal kinase (JNK) protein and modulates the expression of the
 CC JNK protein. Also included are a pharmaceutical composition comprising
 CC the AS oligonucleotide for its bioequivalent, and a pharmaceutical
 CC carrier, treating an animal having/suspected of having/prone to having a
 CC hyperproliferative disease (by administering to a prophylactic or
 CC therapeutic amount of the composition of the AS oligonucleotide),
 CC modulating the expression of a JNK protein in cells or tissues by
 CC contacting the cells or tissues with the AS oligonucleotide, modulating
 CC the cell cycle progression (or the phosphorylation of a protein
 CC phosphorylated by a JNK protein, or expression of a cellular protein that
 CC promotes one or more metastatic events in cultured cells or the cells of
 CC an animal) by administering the oligonucleotide to the cells, inhibiting
 CC the growth of a tumour in an animal by administering the oligonucleotide,
 CC inducing apoptosis in a cell by contacting a cell with an AS
 CC oligonucleotide for JNK2 and treating a human having a disease or
 CC condition associated with a JNK protein or characterised by a reduction
 CC in apoptosis by administering a prophylactic or therapeutic amount of the
 CC AS oligonucleotide. The antisense oligonucleotide is useful for treating
 CC a disease or condition characterised by a reduction in apoptosis, such as
 CC prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic
 CC disease or condition (e.g. fibrotic scarring, peritoneal adhesions, lung
 CC fibrosis or conjunctival scarring), hyperproliferative disease or
 CC condition, such as cancer. The antisense oligonucleotides may also be
 CC used as research agents and diagnostic aids, to detect the presence of
 CC JNK protein-specific nucleic acids in a cell or tissue sample, and to
 CC study the function of one or more genes in the animal. The present
 CC sequence is a sense control oligonucleotide for antisense
 CC oligonucleotides targeting a human JNK.
 XX
 SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1678 GACTTCGGGCTGGCCCGG 1695
 Db 1 GACTTGGCTGGCCCGG 18
 RESULT 1646
 ADA26578/c
 ID ADA26578 standard; DNA; 20 BP.
 XX
 AC ADA26578;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Human Jun N-terminal kinase, JNK2, antisense oligonucleotide ISIS12560.
 XX
 KW ss; human; Jun N-terminal kinase; JNK1; JNK2; JNK3; antisense;
 KW cytostatic; antiinflammatory; apoptosis; prostate cancer;
 KW prostate tumour; inflammation; fibrosis; fibrotic disease;
 KW fibrotic scarring; peritoneal adhesion; lung fibrosis;
 KW conjunctival scarring; hyperproliferative disease; cancer; probe.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20

FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate linkages"

US2003004120-A1.

02-JAN-2003.

31-JAN-2001; 2001US-00774809.

13-AUG-1997; 97US-00910629.

07-AUG-1998; 98US-00130616.

07-APR-1999; 99US-00287796.

15-SEP-1999; 99US-00396902.

(MCKA/) MCKAY R.

(DEAN/) DEAN N M.

(MONI/) MONIA B P.

(NERO/) NERO P.

(GAAR/) GAARDE W A.

Mckay R, Dean NM, Monia BP, Nero P, Gaarde WA;

WPI; 2003-311908/30.

New oligonucleotides which hybridizes to, and modulates the expression of Jun N-terminal kinase, useful for treating a disease or condition characterized by a reduction in apoptosis, e.g. prostate cancer, inflammation or fibrosis.

Claim 25; Page 25; 69pp; English.

The invention relates to an oligonucleotide (antisense, AS) comprising 8-30 nucleotides connected by covalent linkages, where the oligonucleotide has a sequence specifically hybridisable with a nucleic acid encoding a Jun N-terminal kinase (JNK) protein and modulates the expression of the JNK protein. Also included are a pharmaceutical composition comprising the AS oligonucleotide (or its bioequivalent, and a pharmaceutical carrier), treating an animal having/suspected of having/prone to having a hyperproliferative disease (by administering to a prophylactic or therapeutic amount of the composition of the AS oligonucleotide), modulating the expression of a JNK protein in cells or tissues by contacting the cells or tissues with the AS oligonucleotide, modulating the cell cycle progression (or the phosphorylation of a protein phosphorylated by a JNK protein, or expression of a cellular protein that promotes one or more metastatic events in cultured cells or the cells of an animal) by administering the oligonucleotide to the cells, inhibiting the growth of a tumour in an animal by administering the oligonucleotide, inducing apoptosis in a cell by contacting a cell with an AS oligonucleotide for JNK2 and treating a human having a disease or condition associated with a JNK protein or characterised by a reduction in apoptosis by administering a prophylactic or therapeutic amount of the AS oligonucleotide. The antisense oligonucleotide is useful for treating a disease or condition characterised by a reduction in apoptosis, such as prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic disease or condition (e.g. fibrotic scarring, peritoneal adhesions, lung fibrosis or conjunctival scarring), hyperproliferative disease or condition, such as cancer. The antisense oligonucleotides may also be used as research agents and diagnostic aids, to detect the presence of JNK protein-specific nucleic acids in a cell or tissue sample, and to study the function of one or more genes in the animal. The present sequence is an antisense oligonucleotide targeting human JNK2.

Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1678 GACTTCGGCTGCGCCGG 1695

20 GACTTTTGGCTGCGCCGG 3

Db

RESULT 1647

AAD55160

XX AAD55160 standard; DNA; 20 BP.

XX AAD55160;

XX 07-AUG-2003 (first entry)

XX Human lysozyme cDNA amplifying primer, HL4.

XX Transgenic; nucleoprotein; recombinase; lysozyme; human; PCR; primer; ss.

XX Homo sapiens.

XX WO2003022220-A2.

XX 20-MAR-2003.

XX 06-SEP-2002; 2002WO-US028763.

XX 07-SEP-2001; 2001US-0317915P.

XX (REGC) UNIV CALIFORNIA.

XX Maga EA, Anderson GB, Murray JD, Oppenheim SM;

XX WPI; 2003-313182/30.

XX Producing transgenic livestock animal e.g. pig, by introducing nucleoprotein made of nucleic acid and recombinase into totipotent or pluripotent cell, and growing the resulting recombinant totipotent or pluripotent cell.

XX Disclosure; Page 30; 25pp; English.

XX The invention relates to a method for producing transgenic livestock animal e.g. pig, by introducing nucleoprotein made of nucleic acid and recombinase into totipotent or pluripotent cell, and growing the resulting recombinant totipotent or pluripotent cell. The method is useful for producing transgenic livestock animal such as pigs, goats, sheep, cows or horses, preferably goats and pigs. The present sequence is a primer used for amplifying human lysozyme cDNA. This sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 386 TCAAGCTGGCGCATCAGC 403

Db 2 TCAAGCTAGCATCAGC 19

RESULT 1648

ACD06443

XX ACD06443 standard; DNA; 20 BP.

XX ACD06443;

XX 06-AUG-2003 (first entry)

XX Forward RT-PCR primer for human NOV3e/f.

XX Human; ss; PCR; NOVX; cardiomyopathy; atherosclerosis; hypertension;
XX congenital heart defect; prostate cancer; diabetes; metabolic disorder;
XX neoplasm; graft versus host disease; AIDS; bronchial asthma; pruner;
XX Crohn's disease; multiple sclerosis; infectious disease; anorexia;
XX cancer-associated cachexia; neurodegenerative disorder; RT-PCR;
XX Alzheimer's disease; Parkinson's disease; immune disorder;
XX haematopoietic disorder; dyslipidaemia; wasting disorder; gene therapy;

reverse transcriptase PCR.

Homo sapiens.

WO2003023008-A2.

20-MAR-2003.

09-SEP-2002; 2002WO-US028596.

07-SEP-2001; 2001US-0318120P.

07-SEP-2001; 2001US-0318130P.

10-SEP-2001; 2001US-0318430P.

12-SEP-2001; 2001US-0318765P.

17-SEP-2001; 2001US-0322781P.

17-SEP-2001; 2001US-0322816P.

19-SEP-2001; 2001US-0323519P.

20-SEP-2001; 2001US-0323631P.

20-SEP-2001; 2001US-0323636P.

25-SEP-2001; 2001US-0324969P.

25-SEP-2001; 2001US-0325091P.

26-SEP-2001; 2001US-0324990P.

15-FEB-2002; 2002US-0357303P.

28-FEB-2002; 2002US-0360973P.

20-MAR-2002; 2002US-0366131P.

25-MAR-2002; 2002US-0367753P.

02-APR-2002; 2002US-0369479P.

10-MAY-2002; 2002US-0379532P.

17-MAY-2002; 2002US-0381664P.

17-MAY-2002; 2002US-0381672P.

28-MAY-2002; 2002US-0383651P.

29-MAY-2002; 2002US-0384012P.

19-JUN-2002; 2002US-0390155P.

06-SEP-2002; 2002US-0390155P.

(CURA-) CURAGEN CORP.

Zhong M, Li L, Gorman L, Spytek KA, Kekuda R, Taupier RJ; Anderson DW, Vernet CAM, Catterton E, Miller CE, Shenoy SG; Patturajan M, Pena CEA, Tchernev VT, Padigaru M, Gusev VY; Malyankar UM, Burgess CE, Gerlach VL, Casman SJ, Rieger DK; Grosse WM, Smithson G, Peyman JA, Stirling G, Rothenberg ME; Larochele WJ, Shinkens R, Crabtree J, Rastelli L, Voss EZ; Boldog FL, Edinger SR, Millet I, Macdougall JR, Ellerman K; Chapoval A;

WPI; 2003-313246/30.

New polypeptides and polynucleotides having properties related to stimulation of biochemical or physiological responses in a cell or tissue, useful for diagnosing or preventing e.g. atherosclerosis, hypertension, prostate cancer.

Example C; Page 498; 849pp; English.

The invention relates to an isolated polypeptide comprising one of 127 sequences (appearing as ABO1288-ABO1414) designated as NOVX, a mature form of NOVX, an amino acid sequence which is at least 95% identical to NOVX or an amino acid sequence comprising one or more conservative substitutions in NOVX. Also included are nucleic acids encoding NOVX proteins, determining the presence or amount of NOVX or NOVX DNA in a sample (by introducing the sample to an antibody that binds immunospecifically to the polypeptide, and determining the presence or amount of antibody bound to the polypeptide), determining the presence of or predisposition to a disease associated with altered levels of expression of NOVX or NOVX DNA in a first mammalian subject, identifying an agent that binds to NOVX, identifying a potential therapeutic agent for treatment of a pathology related to aberrant expression or aberrant physiological interactions of NOVX, screening for a modulator of activity of or of latency or predisposition to a pathology associated with NOVX, a vector comprising NOVX DNA, a cell comprising the vector (used to produce NOVX) and an anti-NOVX antibody. The NOVX nucleic acids and polypeptides are useful as a marker for cell or tissue type, and in diagnosing and

treating pathologies, diseases, conditions or disorders associated with NOVX sequences, including cardiomyopathy, atherosclerosis, hypertension, congenital heart defects, prostate cancer, diabetes, metabolic disorders, neoplasm, graft versus host disease, AIDS, bronchial asthma, Crohn's disease, multiple sclerosis, infectious diseases, anorexia, cancer-associated cachexia, neurodegenerative disorders (e.g. Alzheimer's disease or Parkinson's disease), immune disorders, haematopoietic disorders, dyslipidaemias, and wasting disorders associated with chronic diseases. These may also be used to screen for molecules which inhibit or enhance NOVX activity or function, and for detecting specific cell types. These may also be used in chromosome mapping, gene therapy, tissue typing, and in forensic biology. The present sequence is a reverse transcriptase (RT)-PCR primer used to assess the tissue specific expression of mRNA encoding a NOVX protein

Sequence 20 BP; 1 A; 6 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 1.7e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1495 GGCTGGACTACTCTTC 1512

Db 3 GGCTGGACTGCTCTTC 20

RESULT 1649

ACD06434

ID ACD06434 standard; DNA; 20 BP.

XX ACD06434;

AC ACD06434;

DT 06-AUG-2003 (first entry)

XX Forward RT-PCR primer for human NOV33b/c/d set 3.

DE Human; ss; PCR; NOVX; cardiomyopathy; atherosclerosis; hypertension; congenital heart defect; prostate cancer; diabetes; metabolic disorder; neoplasm; graft versus host disease; AIDS; bronchial asthma; primer; Crohn's disease; multiple sclerosis; infectious disease; anorexia; cancer-associated cachexia; neurodegenerative disorder; RT-PCR; Alzheimer's disease; Parkinson's disease; immune disorder; haematopoietic disorder; dyslipidaemia; wasting disorder; gene therapy; reverse transcriptase PCR.

XX Homo sapiens.

XX WO2003023008-A2.

XX 20-MAR-2003.

XX 09-SEP-2002; 2002WO-US028596.

XX 07-SEP-2001; 2001US-0318120P.

XX 07-SEP-2001; 2001US-0318130P.

XX 10-SEP-2001; 2001US-0318430P.

XX 12-SEP-2001; 2001US-0318765P.

XX 17-SEP-2001; 2001US-0322781P.

XX 17-SEP-2001; 2001US-0322816P.

XX 19-SEP-2001; 2001US-0323519P.

XX 20-SEP-2001; 2001US-0323631P.

XX 20-SEP-2001; 2001US-0323636P.

XX 25-SEP-2001; 2001US-0324969P.

XX 25-SEP-2001; 2001US-0325091P.

XX 26-SEP-2001; 2001US-0324990P.

XX 15-FEB-2002; 2002US-0357303P.

XX 28-FEB-2002; 2002US-0360973P.

XX 20-MAR-2002; 2002US-0366131P.

XX 25-MAR-2002; 2002US-0367753P.

XX 02-APR-2002; 2002US-0369479P.

XX 10-MAY-2002; 2002US-0379532P.

XX 17-MAY-2002; 2002US-0381664P.

XX 17-MAY-2002; 2002US-0381672P.

XX 28-MAY-2002; 2002US-0383651P.

XX 29-MAY-2002; 2002US-0384012P.

XX 19-JUN-2002; 2002US-0390155P.

XX 06-SEP-2002; 2002US-0390155P.

XX 25-APR-2001; 2001WO-US013354.
 XX
 XX 05-MAY-2000; 2000US-00565339.
 XX
 XX (UYBR-) UNIV BRITISH COLUMBIA.
 XX (CHIL-) CHILDRENS MEDICAL CENT.
 XX (UYPE-) UNIV PENNSYLVANIA.
 XX
 XX Kim SU, Snyder EY, Wolfe JH;
 XX WPI; 2003-559151/52.
 XX
 XX New primordial human neural crest stem cell having a pluripotent and self
 XX -renewing properties, useful for implantation in vivo for cell therapy
 XX treatment of human neurological disorders and diseases.
 XX
 XX Disclosure; Page 39; 70pp; English.
 XX
 XX The present invention relates to a primordial human neural crest stem
 XX cell line suitable for on-demand implantation in vivo into a living host
 XX subject comprising a pluripotent and self-renewing neural crest stem cell
 XX of human origin. The cell line is useful in the cell therapy treatment of
 XX human neurological disorders and diseases. The present sequence is a PCR
 XX primer used to isolate human genes from the HNC10 cell line
 XX
 XX Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
 XX
 XX Query Match 0.4%; Score 14.8; DB 1; Length 20;
 XX Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 XX 1123 ACGCTGCGCAATGTCCTC 1140
 XX 18 ACCCTGGCCCAATGTCACC 1
 XX
 XX RESULT 1652
 XX ACD44750
 XX ID ACD44750 standard; DNA; 20 BP.
 XX
 XX ACD44750;
 XX
 XX 09-SEP-2003 (first entry)
 XX
 XX PKA regulatory subunit RII alpha inhibitory oligonucleotide ISIS102773.
 XX
 XX Human; ss; antisense therapy; infection; inflammation; tumour;
 XX protein kinase A regulatory subunit RII alpha.
 XX
 XX Synthetic.
 XX Homo sapiens.
 XX
 XX US6524854-B1.
 XX
 XX 25-FEB-2003.
 XX
 XX 11-SEP-2001; 2001US-00954560.
 XX
 XX 11-SEP-2001; 2001US-00954560.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Monia BP, Cowseert LM;
 XX
 XX WPI; 2003-511923/48.
 XX
 XX New antisense compounds, useful for modulating the expression of protein
 XX kinase A (PKA) regulatory subunit RII alpha, and for treating a disease
 XX or condition associated with expression of PKA regulatory subunit RII
 XX alpha.
 XX
 XX Claim 15; Col 43-44; 35pp; English.

XX The invention relates to antisense compounds targeted to nucleic acids
 XX encoding protein kinase A regulatory subunit RII alpha. The antisense
 XX compounds are useful for modulating the expression of protein kinase A
 XX (PKA) regulatory subunit RII alpha and for treating a disease or
 XX condition associated with expression of PKA regulatory subunit RII alpha.
 XX The compounds are also useful as research reagents and kits, or for
 XX diagnostics, therapeutics and prophylaxis, e.g. to prevent or delay
 XX infection, inflammation or tumour formation. The present sequence
 XX represents a human protein kinase A regulatory subunit RII alpha
 XX inhibitory oligonucleotide
 XX
 XX Sequence 20 BP; 1 A; 9 C; 6 G; 4 T; 0 U; 0 Other;
 XX
 XX Query Match 0.4%; Score 14.8; DB 1; Length 20;
 XX Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 XX 1128 GGCCAAATGTCCTCGAGCT 1145
 XX 3 GGCCAAATGTCCTCGAGCT 20
 XX
 XX RESULT 1653
 XX ADB36685/C
 XX ID ADB36685 standard; DNA; 20 BP.
 XX
 XX ADB36685;
 XX
 XX 04-DEC-2003 (first entry)
 XX
 XX Immunostimulatory nucleic acid #299.
 XX
 XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
 XX hypo-responsive subject; immunostimulatory.
 XX
 XX Synthetic.
 XX
 XX US2003087848-A1.
 XX
 XX 08-MAY-2003.
 XX
 XX 02-FEB-2001; 2001US-00776479.
 XX
 XX 03-FEB-2000; 2000US-0179991P.
 XX
 XX (BRAT/) BRATZLER R L.
 XX (PETE/) PETERSEN D M.
 XX (FOUR/) FOURON Y.
 XX
 XX Bratzler RL, Petersen DM, Fouron Y;
 XX WPI; 2003-657977/62.
 XX
 XX Treating and/or preventing allergy or asthma using an immunostimulatory
 XX nucleic acid alone or in combination with an asthma/allergy medicament.
 XX
 XX Disclosure; Page 9; 221pp; English.
 XX
 XX The invention relates to a method of treating or preventing allergy or
 XX asthma which comprises administering to a subject a poly-G nucleic acid
 XX in an aerosol formulation. The methods and compositions of the present
 XX invention are useful for diagnosing and/or treating asthma and allergy
 XX especially in a hypo-responsive subject. The present sequence represents
 XX an immunostimulatory nucleic acid of the invention.
 XX
 XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
 XX
 XX Query Match 0.4%; Score 14.8; DB 1; Length 20;
 XX Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 XX 1678 GACTTCGGGCTGGCCCGG 1695

```
Db      20 GACTTTGGCGCTGGCCCGG 3
RESULT 1654
ADD44694/C
ID      ADD44694 standard; DNA; 20 BP.
XX
AC      ADD44694;
XX
DT      15-JAN-2004 (first entry)
XX
DE      Human c-Raf antisense oligonucleotide #5.
XX
KW      Human; ss; antisense; c-Raf; virucide; anti-HIV; antiarteriosclerotic;
KW      cytostatic; 2'-fluoro substituent; AIDS; atherosclerosis; cancer.
XX
OS      Homo sapiens.
XX
PN      US2003187240-A1.
XX
PD      02-OCT-2003.
XX
PF      28-JAN-2003; 2003US-00352586.
XX
PR      11-JAN-1990; 90US-00463358.
PR      13-AUG-1990; 90US-00566977.
PR      05-MAR-1992; 92US-00835932.
PR      06-JUN-1995; 95US-00468037.
PR      02-SEP-1999; 99US-00389283.
XX
PA      (ISIS-) ISIS PHARM INC.
XX
PI      Cook PD, Kawasaki AM;
XX
WPI; 2003-831271/77.
XX
Modified oligonucleotides useful as therapeutics, diagnostics and
PT      research agents comprises several covalently bound nucleosides joined by
PT      internucleoside linkages.
XX
Example 31; SEQ ID NO 11; 49pp; English.
XX
The invention relates to a modified oligonucleotide comprising several
CC      covalently bound nucleosides including a ribose or deoxyribose sugar
CC      portion and a base portion. The nucleosides are joined together by
CC      internucleoside linkages such that the base portion of the nucleosides
CC      form a mixed base sequence. At least one of the nucleosides includes a
CC      modified ribofuranosyl moiety bearing a 2'-fluoro substituent. The
CC      antisense oligonucleotides of the invention are useful as therapeutics,
CC      diagnostics and research agents e.g. for the treatment of various viruses
CC      (e.g. AIDS), for modulating the production of proteins by an organism,
CC      treating an organism having a disease involving an undesired production
CC      of a protein (e.g. atherosclerosis, cancer), detecting the presence or
CC      absence of abnormal RNA molecules, or abnormal or inappropriate
CC      expression of normal RNA molecules in organisms or cells, and for the
CC      selective binding of RNA for use as research reagents and diagnostic
CC      agents. The compounds have improved stability to enzymatic degradation
CC      with various intracellular and extracellular nucleases, and improved
CC      ability to bind to a specific DNA or RNA with fidelity compared to wild-
CC      type DNA-DNA and RNA-DNA duplexes and phosphorus-modified oligonucleotide
CC      triesters. The present sequence is an antisense oligonucleotide of the
CC      invention targeting human c-Raf.
XX
Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;
Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY      844 CTGCCAGCCGAGGAGGAG 861
||||||| |||||||
Db      20 CTGCCAGCCGAGGAGGAG 3
RESULT 1655
ADD68683/C
ID      ADD68683 standard; DNA; 20 BP.
XX
AC      ADD68683;
XX
DT      15-JAN-2004 (first entry)
XX
DE      DNA amplification-related PCR primer - SEQ ID 40.
XX
KW      PCR; DNA amplification; ss; primer.
XX
OS      Unidentified.
XX
PN      JP2002315583-A.
XX
PD      29-OCT-2002.
XX
PF      29-JUN-2001; 2001JP-00197813.
XX
PR      29-JUN-2000; 2000JP-00196242.
XX
PA      (DOKU-) DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.
XX
WPI; 2003-375838/36.
XX
Amplification of a DNA, a gene encoding the repeated sequence of an amino
PT      acid sequence.
XX
Example 4; SEQ ID NO 40; 33pp; Japanese.
XX
The invention relates to a novel method for amplifying a DNA using
CC      polymerase chain reaction (PCR) comprising synthesizing the first region
CC      of a base sequence to be amplified by designing a pair of primers so as
CC      to place the first region between them and to anneal each other at the 3',
CC      -end and carrying out a polymerase chain reaction (PCR) using the
CC      primers. Subsequently, the second region is synthesised by designing a
CC      pair of primers so as to place the second region partly overlapping with
CC      the first region of the base sequence between them and to anneal each
CC      other at the 3'-end and carrying out a PCR using the primers. Finally,
CC      the first region is annealed to the second region generating the template
CC      to carry out a PCR and thus to synthesize a base sequence containing the
CC      first and the second regions. The method of the invention may be useful
CC      for amplifying a DNA sequence. The current sequence is that of the DNA
CC      amplification-related PCR primer of the invention.
XX
Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY      3192 TGCCCCGAGCTGGAGGA 3209
||||||| |||||||
Db      18 TGCCCCGAGCTGGAGGA 1
RESULT 1656
ADE86164
ID      ADE86164 standard; DNA; 20 BP.
XX
AC      ADE86164;
XX
DT      29-JAN-2004 (first entry)
XX
DE      HRAS gene regulatory region quadruplex DNA.
XX
KW      HRAS; quadruplex DNA; gene therapy; cancer; cytostatic; oncogene; human;
XX      ds.
XX
```

OS Homo sapiens.
 XX WO2003087317-A2.
 PN
 PD 23-OCT-2003.
 XX
 XX 04-APR-2003; 2003WO-US010658.
 PF
 XX 05-APR-2002; 2002US-0370358P.
 PR
 XX 20-AUG-2002; 2002US-0404966P.
 PR
 XX 20-MAR-2003; 2003US-0456637P.
 XX
 PA (CYTE-) CYTERNEX INC.
 PA (ARIZ-) ARIZONA BOARD OF REGENTS.
 XX
 PI Siddiqui-Jain A, Grand CL, Bearss DJ, Hurley LH, Farrell TJ;
 DR WPI; 2003-853947/79.
 XX
 XX Claim 3; Page 46; 69pp; English.
 CC The present sequence is from the upstream regulatory region of the HRAS
 CC gene. The sequence is involved in the regulation of transcription. It
 CC forms a quadruplex structure through the formation of guanine tetrads.
 CC The sequence provides an example of intramolecular chair quadruplex DNA
 CC structures that have been identified as oncogene regulators. Certain
 CC mutations in quadruplex forming nucleotides sequences have been shown to
 CC destabilise quadruplex structure and are associated with cancer. Methods
 CC are provided for identifying quadruplex nucleotide sequences having
 CC destabilising guanine substitutions, for determining whether a subject is
 CC at risk of developing or having cancer, pharmacogenomic methods for
 CC targeting appropriate prevention or therapeutic regimens, methods for
 CC screening molecules that interact with stabilised and destabilised
 CC quadruplexes, and therapeutic methods for treating cancers, such as
 CC antisense nucleic acid cancer therapy that specifically targets DNA in
 CC subjects having a quadruplex-destabilising mutation.
 XX
 SQ Sequence 20 BP; 0 A; 3 C; 17 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2920 GGGCGGGCGTGGGGGG 2937
 Db |||||
 3 GGGCGGGCGGGGGGG 20
 RESULT 1657
 ADEB6160
 ID ADEB6160 standard; DNA; 20 BP.
 XX
 AC ADEB6160;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE RET gene regulatory region quadruplex DNA.
 XX
 KW Platelet derived growth factor alpha; PDGF; quadruplex DNA; gene therapy;
 KW cancer; cytosstatic; oncogene; human; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO2003087317-A2.
 XX
 PD 23-OCT-2003.
 XX
 XX 04-APR-2003; 2003WO-US010658.
 PF

XX 05-APR-2002; 2002US-0370358P.
 PR 20-AUG-2002; 2002US-0404966P.
 PR 20-MAR-2003; 2003US-0456637P.
 XX
 PA (CYTE-) CYTERNEX INC.
 PA (ARIZ-) ARIZONA BOARD OF REGENTS.
 XX
 PI Siddiqui-Jain A, Grand CL, Bearss DJ, Hurley LH, Farrell TJ;
 XX WPI; 2003-853947/79.
 DR
 XX
 XX Identifying a compound that modulates the biological activity of a native
 PT quadruplex DNA for treating colorectal cancer comprises determining the
 PT presence or absence of interaction between the candidate compound and the
 PT test quadruplex DNA.
 XX
 PS Claim 3; Page 46; 69pp; English.
 XX
 CC The present sequence is from the upstream regulatory region of the RET.
 CC It forms a chair quadruplex structure ADEB6192 with 2 stable tetrads that
 CC regulates transcription. The sequence provides an example of
 CC intramolecular chair quadruplex DNA structures that have been identified
 CC as oncogene regulators. Certain mutations in quadruplex forming
 CC nucleotides sequences have been shown to destabilise quadruplex structure
 CC and are associated with cancer. Methods are provided for identifying
 CC quadruplex nucleotide sequences having destabilising guanine
 CC substitutions, for determining whether a subject is at risk of developing
 CC or having cancer, pharmacogenomic methods for targeting appropriate
 CC prevention or therapeutic regimens, methods for screening molecules that
 CC interact with stabilised and destabilised quadruplexes, and therapeutic
 CC methods for treating cancers, such as antisense nucleic acid cancer
 CC therapy that specifically targets DNA in subjects having a quadruplex-
 CC destabilising mutation.
 XX
 SQ Sequence 20 BP; 0 A; 3 C; 17 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2920 GGGCGGGCGTGGGGGG 2937
 Db |||||
 3 GGGCGGGCGGGGGGG 20
 RESULT 1658
 ADEB5472
 ID ADEB5472 standard; DNA; 20 BP.
 XX
 AC ADEB5472;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Human WNT2B forward PCR primer SEQ ID NO:5.
 XX
 KW ss; primer; human; PCR; WNT; chronic rheumatoid arthritis; WNT10B;
 KW rheumatoid arthritis; osteoarthritis.
 XX
 OS Homo sapiens.
 XX
 PN WO2003093508-A1.
 XX
 PD 13-NOV-2003.
 XX
 PF 25-APR-2003; 2003WO-JP005358.
 XX
 PR 02-MAY-2002; 2002JP-00130883.
 XX
 PA (NISC-) JAPAN SCI & TECHNOLOGY CORP.
 XX
 PI Imai K;
 XX

DR WPI; 2003-854488/79.

XX Detection of over expression of WNT10B by analysis of synovial fluid, joint tissue or peripheral blood for diagnosis of chronic rheumatoid arthritis.

XX Disclosure; SEQ ID NO 5; 28pp; Japanese.

XX The invention relates to a novel method for diagnosis of chronic rheumatoid arthritis in which synovial fluid, joint tissue or peripheral blood is analysed to detect greater than normal expression of WNT10B. The method is useful for simple diagnosis of rheumatoid arthritis and its discrimination from osteoarthritis. The present sequence represents a PCR primer used in the invention.

XX

SQ Sequence 20 BP; 3 A; 3 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 1.7e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3631 CTGAGTCTGGCGAGCTGT 3648
||||| |||||

Db 2 CTGAGTCTGTGCAGCTGT 19

RESULT 1659

ADF09730/c

ID ADF09730 standard; DNA; 20 BP.

XX ADF09730;

XX

XX 12-FEB-2004 (first entry)

DT Human c-raf kinase antisense oligonucleotide seq id 26.

DE

XX tumour metastasis; human; raf; raf expression inhibitor; cytostatic; antiarteriosclerotic; antisense-therapy; hyperproliferative disorder; atherosclerosis; tumour; c-raf kinase; antisense oligonucleotide; ss.

XX

XX Homo sapiens.

XX

XX US2003119769-A1.

XX

XX 26-JUN-2003.

XX

XX 14-JUN-2002; 2002US-00173225.

XX

XX 31-MAY-1994; 94US-00250856.

XX 31-MAY-1995; 95WO-US007111.

XX 26-NOV-1996; 96US-00756806.

XX 07-JUL-1997; 97US-00888982.

XX 06-JUL-1998; 98WO-US013961.

XX 28-AUG-1998; 98US-00143214.

XX 18-FEB-2000; 2000US-00506073.

XX 25-JAN-2002; 2002US-00057550.

XX

PA (MONI/) MONIA B P.

XX

PI Monia BP;

XX

XX WPI; 2003-863446/80.

XX

XX Preventing and/or treating conditions associated with raf expression, such as hyperproliferative disorders, atherosclerosis and tumors, using raf antisense oligonucleotide modulation of human raf gene expression.

XX

XX Disclosure; SEQ ID NO 26; 41pp; English.

XX

XX The invention describes a method of preventing or treating tumour metastasis in an animal comprising administering to the animal an oligonucleotide 8-50 nucleotides in length, which is targeted to mRNA encoding human raf and capable of inhibiting raf expression. Also

CC disclosed are raf oligonucleotides, nucleic acids, proteins and compositions used in the methods of the invention. The oligonucleotides have cytostatic and antiarteriosclerotic properties, are useful as raf inhibitors and in antisense-therapy. The methods and compositions of the present invention are useful for preventing and/or treating conditions associated with raf expression, such as hyperproliferative disorders, atherosclerosis and tumors. This sequence represents a human c-raf kinase antisense oligonucleotide.

XX

SQ Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 1.7e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 844 CTGCCAGCCGAGGAGGAG 861
||||| |||||

Db 20 CTGCCAGGAGGAGGAG 3

RESULT 1660

ADG32593

ID ADG32593 standard; DNA; 20 BP.

XX

XX ADG32593;

XX

XX 26-FEB-2004 (first entry)

DT Murine TRPV transcript PCR primer SeqID 48.

DE

XX mouse; murine; PCR; ss; vanilloid receptor; VR; pain perception; TRPV3; VRLX; VRLX; VR4; TRPV7; TRPV4; VRL3; OTRPC4; TRPM8; trka+; inflammation; skin disorder; cancer; analgesic; antiinflammatory; dermatological; cytostatic; primer.

XX

XX Mus musculus.

XX

XX WO2002101045-A2.

XX

XX 19-DEC-2002.

XX

XX 13-JUN-2002; 2002WO-EP006520.

XX

XX 13-JUN-2001; 2001US-0297835P.

XX 22-JAN-2002; 2002US-0351238P.

XX 29-JAN-2002; 2002US-0352914P.

XX 12-FEB-2002; 2002US-0357161P.

XX 15-MAY-2002; 2002US-0381086P.

XX 16-MAY-2002; 2002US-0381739P.

XX

XX (NOVS) NOVARTIS AG.

XX (IRMI-) IRM LLC.

XX Patapoutian A, Song C, Ganju P, Peier A, McIntyre P, Bevan S;

XX WPI; 2003-156962/15.

XX

XX New isolated TRPV3, TRPV4 or TRPM8 vanilloid receptor nucleic acid molecule and polypeptides, useful for the diagnosis and treatment of disorders such as pain, inflammation, skin diseases and cancer.

XX

XX Example 1; SEQ ID NO 48; 197pp; English.

XX

XX This invention relates to novel vanilloid receptor (VR) related nucleic acids and encoded proteins thereof. Specifically, it refers to certain members of the VR family that are involved in pain perception, in particular, TRPV3 (previously known as VRL3 & OTRPC4), TRPV4 (previously known as VRL4 & TRPV7), TRPV4 (previously known as VRL3 & OTRPC4) and TRPM8 (previously known as TRPX). Furthermore, this invention includes trka+ pain specific genes expressed in the sensory neurons of the dorsal root ganglia. Accordingly, such compositions can be useful for the diagnosis, treatment and prevention of pain, inflammation, skin disorders and cancer, and so exhibit analgesic, antiinflammatory, dermatological and cytostatic activities. This

CC oligonucleotide sequence is a PCR primer used to amplify the murine TRPV3
 CC DNA of the invention.

SQ Sequence 20 BP; 7 A; 1 C; 10 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 186 GGAGGACGAGGCTGAGGA 203
 |||||
 DB 2 GGAGGACGAGGCTGAGGA 19

RESULT 1661
 ADG32618/C
 ID ADG32618 standard; DNA; 20 BP.

XX AC ADG32618;

DT 26-FEB-2004 (first entry)

DE Murine TRPV transcript PCR primer SeqID 73.

XX mouse; murine; PCR; ss; vanilloid receptor; VR; pain perception; TRPV3;
 KW VRLX; VR4; TRPV7; TRPV4; VRL3; OTRPC4; TRPM8; TRPX; trkA+;
 KW inflammation; skin disorder; cancer; analgesic; antiinflammatory;
 KW dermatological; cytostatic; primer.

XX Mus musculus.

OS WO2002101045-A2.

PN 19-DEC-2002.

XX 13-JUN-2002; 2002WO-EP006520.

PF 13-JUN-2001; 2001US-0297835P.

PR 22-JAN-2002; 2002US-0351238P.

PR 29-JAN-2002; 2002US-0352914P.

PR 12-FEB-2002; 2002US-0357161P.

PR 15-MAY-2002; 2002US-0381086P.

PR 16-MAY-2002; 2002US-0381739P.

XX (NOVS) NOVARTIS AG.

PA (IRMI-) IRM LLC.

XX Patapoutian A, Song C, Ganju P, Peier A, McIntyre P, Bevan S;

PI WPI; 2003-156962/15.

XX New isolated TRPV3, TRPV4 or TRPM8 vanilloid receptor nucleic acid
 PT molecule and polypeptides, useful for the diagnosis and treatment of
 PT disorders such as pain, inflammation, skin diseases and cancer.

XX Example 1; SEQ ID NO 73; 197pp; English.

XX This invention relates to novel vanilloid receptor (VR) related nucleic
 CC acids and encoded proteins thereof. Specifically, it refers to certain
 CC members of the VR family that are involved in pain perception, in
 CC particular, TRPV3 (previously known as VRLX, VR4 & TRPV7), TRPV4
 CC (previously known as VRL3 & OTRPC4) and TRPM8 (previously known as TRPX).
 CC Furthermore, this invention includes trkA+ pain specific genes expressed
 CC in the sensory neurons of the dorsal root ganglia. Accordingly, such
 CC compositions can be useful for the diagnosis, treatment and prevention of
 CC pain, inflammation, skin disorders and cancer, and so exhibit analgesic,
 CC antiinflammatory, dermatological and cytostatic activities. This
 CC oligonucleotide sequence is a PCR primer used to amplify the murine TRPV3
 CC DNA of the invention.

XX Sequence 20 BP; 2 A; 10 C; 1 G; 7 T; 0 U; 0 Other;

SQ Query Match 0.4%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 186 GGAGGACGAGGCTGAGGA 203
 |||||
 DB 19 GGAGGACGAGGCTGAGGA 2

RESULT 1662

ADF88029

ID ADF88029 standard; DNA; 20 BP.

XX AC ADF88029;

DT 26-FEB-2004 (first entry)

DE Single nucleotide polymorphism detection primer, SEQ ID NO 1612.

XX human; single nucleotide polymorphism; microarray; side effect; ss;
 KW primer; PCR.
 XX Synthetic.
 OS Homo sapiens.

XX JP2003235571-A.

PN 26-AUG-2003.

PD 12-FEB-2002; 2002JP-00034717.

XX 12-FEB-2002; 2002JP-00034717.

XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.

XX WPI; 2003-820454/77.

XX Novel polynucleotide useful for detecting single nucleotide polymorphisms
 in human gene.
 PT Claim 2; SEQ ID NO 1612; 704pp; Japanese.
 XX The invention relates to a novel polynucleotide isolated and purified
 CC from a human gene having any one of 935 fully defined sequences as given
 CC in specification, or a sequence having a base substitution. The invention
 CC further relates to: an oligonucleotide containing single nucleotide
 CC polymorphisms; a PCR primer set chosen from the combination of two DNA
 CC fragments from any one of 1220 fully defined sequences as given in
 CC specification; a labelling probe containing the SNP containing oligo; and
 CC a microarray equipped with the SNP containing oligo. The isolated human
 CC gene of the invention is useful for detecting the single nucleotide
 CC polymorphisms in human gene. The isolated human gene is also useful for
 CC diagnosis of disease and determination of side effect to a medical agent.
 CC The isolated human gene is also effective in detecting single nucleotide
 CC polymorphisms in a human gene. This polynucleotide sequence represents
 CC one of the PCR primers used in the single nucleotide polymorphism
 CC detection method of the invention.

XX Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

SQ Query Match 0.4%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1292 CCGTGAAGATGCTGAAG 1309
 |||||
 DB 3 CCGTGAAGATGCTGAAG 20

RESULT 1663

AD112084/C

ID AD112084 standard; DNA; 20 BP.

XX AC AD112084;

```
XX 15-APR-2004 (first entry)
XX Human c-raf antisense oligonucleotide ISIS #7854.
XX ss; nuclease resistant; mixed sequence; 2'-deoxyfuranosyl; c-raf;
XX antisense; human.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "OTHER= Phosphorothioate"
XX modified_base 1..12
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER= Optionally 2'-O-methyl"
XX
XX US6531584-B1.
XX
XX 11-MAR-2003.
XX
XX 02-SEP-1999; 99US-00389283.
XX
XX 11-JAN-1990; 90US-00463358.
XX
XX 13-AUG-1990; 90US-00566977.
XX
XX 05-MAR-1992; 92US-00835932.
XX
XX 01-JUL-1992; 92US-00854634.
XX
XX 06-JUN-1995; 95US-00468037.
XX
XX 05-MAR-1998; 98US-00035357.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cook PD, Kawasaki AM;
XX
XX WPI; 2003-566474/53.
XX
XX Nuclease resistant mixed sequence oligonucleotides useful as
XX therapeutic, diagnostic, and research agents comprise at least one
XX modified 2'-deoxyfuranosyl group.
XX
XX Example 31; SEQ ID NO 11; 48pp; English.
XX
XX The invention relates to a nuclease resistant mixed sequence
XX oligonucleotides comprising at least one modified 2'-deoxyfuranosyl
XX group. The modified oligonucleotides are disclosed as being useful for
XX modulating the production of a protein by an organism, and especially for
XX treating a disease in an organism which is characterised by the undesired
XX production of a protein. The oligonucleotides may be used to treat
XX diseases caused by viruses or other agents. The oligonucleotides may also
XX be used for diagnostic methods for detecting the presence or absence of
XX abnormal RNA molecules, or for detecting the inappropriate expression of
XX normal RNA molecules in an organism or cell. Oligonucleotides of the
XX invention that selectively bind RNA may also be useful as research
XX reagents. The new oligonucleotides are nuclease resistant and hybridise
XX to RNA or DNA targets with high strength and specificity. The present
XX sequence represents a human c-raf antisense oligonucleotide.
XX
XX Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;
```

```
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY 844 CTGCAGCCGAGGAGGAG 861
DB 20 CTGCAGGGGAGGAGGAG 3
```

RESULT 1664

```
ABZ90613/c
XX ID ABZ90613 standard; DNA; 20 BP.
XX AC ABZ90613;
XX DT 17-OCT-2003 (first entry)
XX DE Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasegna A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiqunone.
XX
XX Disclosure; SEQ ID NO 5855; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiqunone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cytostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX receptor, producing bronchodilation, increasing levels of ubiqunone or
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 1 A; 1 C; 13 G; 5 T; 0 U; 0 Other;
```

```
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY 2159 CCCCAGCCCCCAGGAGCA 2176
DB 18 CCCCAGCCCCCAGGAGCA 1
```

RESULT 1665

ABZ98850
ID ABZ98850 standard; DNA; 20 BP.
XX
XX AC ABZ98850;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human PDE4A oligonucleotide sequence.
DE
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
OS
XX WO200285308-A2.
PN
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US013135.
PF
XX 24-APR-2001; 2001US-0286137P.
PR
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
PI
XX WPI; 2003-229219/22.
DR
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 14092; 872pp; English.
PS
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 2 A; 6 C; 10 G; 2 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1573 CAGGTGGCCCGGGGCATG 1590
DB 1 CGGGAGGCCCGGGGCATG 18
RESULT 1667

ABZ98662/C
ID ABZ98662 standard; DNA; 20 BP.
XX
XX AC ABZ98662;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human tryptase a oligonucleotide sequence.
DE
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
OS
XX WO200285308-A2.
PN
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US013135.
PF
XX 24-APR-2001; 2001US-0286137P.
PR
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
PI
XX WPI; 2003-229219/22.
DR
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 13904; 872pp; English.
PS
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 2 A; 10 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3196 CCGAGCTGAGGATCCC 3213
DB 19 CTGAGCTGAGGAGCCC 2
RESULT 1666

ABZ82743/c
ID ABZ82743 standard; DNA; 20 BP.
AC ABZ82743;
XX 14-MAY-2003 (first entry)
XX Human HSL chimeric phosphorothioate oligonucleotide SEQ ID NO:132.
XX Hormone-sensitive lipase; antisense oligonucleotide; inhibitor; obesity;
KW phosphorothioate; antidiabetic; anorectic; cytostatic; antisense therapy;
KW abnormal metabolic condition; hyperlipidaemia; type 2 diabetes; cancer;
KW hyperproliferative disorder; human; ss.
XX Homo sapiens.
OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) wing"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) wing"
XX WO2003010139-A2.
XX 06-FEB-2003.
XX 15-JUL-2002; 2002WO-US023672.
XX 26-JUL-2001; 2001US-00915814.
XX (ISIS-) ISIS PHARM INC.
XX Butler MM, Watt AT, Freier SM, Wyatt JR;
PI WPI; 2003-239411/23.
XX New antisense oligonucleotides targeted against nucleic acids encoding
PT hormone-sensitive lipase, useful for treating abnormal metabolic
PT condition, e.g. hyperlipidemia and obesity, or a hyperproliferative
PT disorder, e.g. cancer.
XX Claim 3; Page 89; 167pp; English.
XX The present invention describes a compound (I) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding a hormone-sensitive lipase
CC (HSL) or a splice variant of HSL. The compound specifically hybridises
CC with and inhibits the expression of HSL or a splice variant of HSL, or
CC specifically hybridises with at least an 8-nucleobase portion of an
CC active site on a nucleic acid molecule encoding HSL. (I) have anorectic,
CC antidiabetic and cytostatic activities, and can be used in antisense
CC therapy. (I) is useful for treating an animal, particularly human,
CC suspected of having an abnormal metabolic condition such as obesity,
CC hyperlipidaemia, type 2 diabetes, a hyperproliferative disorder such as
CC cancer (e.g. pituitary, colorectal, breast, testicular, pulmonary or
CC epithelial cancer). (I) is also useful in modulating blood glucose
CC levels, particularly plasma or serum glucose levels, in a diabetic
CC animal. The present sequence represents a human hormone-sensitive lipase
CC chimeric phosphorothioate antisense oligonucleotide, which is used in an
CC example from the present invention
XX Sequence 20 BP; 5 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
SQ

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2705 CCCTGCCCTCAGACT 2722
Db 19 CCCTGCTCTCCGAGACT 2
RESULT 1670
ACC82898/c
ID ACC82898 standard; DNA; 20 BP.
XX ACC82898;
AC ACC82898;
XX 27-AUG-2003 (first entry)
XX Human TRIP6 antisense oligonucleotide ISIS #198770.
XX Human; antisense; thyroid hormone receptor interactor 6; TRIP6; tumour;
KW OPA-interacting protein-1; OIP-1; zyxin-related protein-1; prophylaxis;
KW inflammation; therapy; hyperproliferative disorder; infection; cancer;
KW chromosome 7q22; ZRP-1; phosphorothioate; ss.
XX Homo sapiens.
OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone; All cytidine residues
FT are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX WO2003040328-A2.
XX 15-MAY-2003.
XX 05-NOV-2002; 2002WO-US035479.
XX 08-NOV-2001; 2001US-00008789.
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Dobie K;
PI WPI; 2003-430662/40.
XX New antisense oligonucleotides targeted to nucleic acids encoding thyroid
PT hormone receptor interactor 6, useful for diagnosing or treating
PT hyperproliferative disorders, such as cancer.
XX Example 15; Page 76; 111pp; English.
XX The invention relates to antisense compounds targeted to a nucleic acid
CC encoding thyroid hormone receptor interactor 6 (TRIP6) to inhibit its
CC expression. TRIP6 is also known as OPA-interacting protein-1 (OIP-1) and
CC zyxin-related protein-1 (ZRP-1). TRIP6 DNA is located on chromosome 7q22.
CC Antisense compounds of the invention are useful for modulating the
CC expression of TRIP6 and for treating diseases or conditions associated
CC with the expression of TRIP6 such as hyperproliferative disorders (e.g.
CC cancer). They are useful for diagnostics, therapeutics, prophylaxis e.g.
CC to prevent or delay infection, inflammation or tumour formation, as
CC research reagents and kits and in distinguishing between functions of
CC various members of a biological pathway. They are also useful in antisense
CC therapy. The present sequence is an antisense oligo targeted to human
CC TRIP6 DNA. This oligo is used in the exemplification of the invention

```
XX
SQ Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;
    Query Match      0.4%; Score 14.8; DB 1; Length 20;
    Best Local Similarity 88.9%; Pred. No. 1.7e+03;
    Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1116 GGGCCCCACGCTGGCCAA 1133
Db 18 GAGCACCACGCTGGCCAA 1

RESULT 1671
ID ACD42098/c
XX
AC ACD42098;
XX
DT 05-SEP-2003 (first entry)
XX
DE Antisense oligonucleotide targeting human c-raf, ISIS7854.
XX
KW Human; ss; antisense; c-raf; a-raf; b-raf; protein kinase; cancer;
KW signal transduction; cell proliferation; lung carcinoma; cytostatic;
KW antisense gene therapy; chemotherapeutic agent; angiogenesis;
KW hyperproliferative condition; neovascularisation; ocular angiogenesis.
XX
OS Homo sapiens.
XX
US2003032607-A1.
PN
XX
PD 13-FEB-2003.
XX
PF 25-JAN-2002; 2002US-00057550.
XX
PR 31-MAY-1994; 94US-00250856.
PR 31-MAY-1995; 95WO-US007111.
PR 26-NOV-1996; 96US-00756806.
PR 07-JUL-1997; 97US-00888982.
PR 06-JUL-1998; 98WO-US011361.
PR 28-AUG-1998; 98US-00143214.
PR 18-FEB-2000; 2000US-00506073.
XX
PA (MONI/) MONIA B P.
XX
PI Monia BP;
XX
WPI; 2003-503332/47.
XX
PT Novel antisense oligonucleotide which is targeted to mRNA encoding human
PT raf and which is capable of inhibiting raf expression, useful for
PT treating or preventing hyperproliferative conditions such as cancer.
XX
PS Disclosure; Page 8; 42pp; English.
XX
CC The invention relates to an oligonucleotide 8-50 nucleotides in length
CC which is targeted to mRNA encoding human c-raf, a-raf or b-raf (raf is a
CC protein kinase playing a regulatory role in signal transduction,
CC regulating cell proliferation and has been implicated in lung carcinoma),
CC and which is capable of inhibiting raf expression. Also included is a
CC composition comprising the oligonucleotide and a pharmaceutically
CC acceptable carrier. The antisense oligonucleotide is useful for
CC inhibiting the expression of human raf in human cells or tissues, by
CC contacting the human cells or tissues with the oligo. The oligo. is also
CC is useful for treating or preventing a disease or condition associated
CC with the expression of raf by administering it in combination with a
CC chemotherapeutic agent to a human or cells of the human, where the
CC expression of raf is abnormal expression, and the condition is a
CC hyperproliferative condition such as cancer, angiogenesis or
CC neovascularisation (preferably ocular angiogenesis or
CC neovascularisation). The oligo. is also useful for inhibiting
CC hyperproliferation of cells. The oligos. are also useful as tools, for
CC example for detecting and determining the role of raf expression in
```

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CC various cell functions and physiological processes and conditions and for
CC diagnosing conditions associated with raf expression and for research
CC purposes. The present sequence is an antisense oligonucleotide targeting
CC a human raf mRNA
XX
SQ Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;
    Query Match      0.4%; Score 14.8; DB 1; Length 20;
    Best Local Similarity 88.9%; Pred. No. 1.7e+03;
    Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 844 CTGCCAGCCGAGGAGGAG 861
Db 20 CTGCCAGCCGAGGAGGAG 3

RESULT 1672
ID AAD55037 standard; DNA; 20 BP.
XX
AC AAD55037;
XX
DT 26-JUN-2003 (first entry)
XX
DE Alstroemeria gad3 gene cloning primer, NM12.
XX
KW Alpha-methylene-gamma-butyrolactone; glutamate decarboxylase; herbicide;
KW enzyme; gamma-aminobutyrate aminotransferase; UDP-glucosyltransferase;
KW gamma-hydroxybutyrate dehydrogenase; tulipalin A; plant; primer; ss.
XX
OS Alstroemeria.
XX
WO2002101013-A2.
XX
PD 19-DEC-2002.
XX
PF 10-JUN-2002; 2002WO-US019230.
XX
PR 08-JUN-2001; 2001US-0297198P.
XX
PA (DUPO ) DU PONT DE NEMOURS & CO E I.
PA (PRAB/) PRABHU V.
XX
PI Damude HG, Flint D, Prabhu V, Wang H;
XX
WPI; 2003-201331/19.
XX
PT Novel isolated nucleic acid fragment encoding a tuliposide A synthesizing
PT protein, useful for creating recombinant organisms that have the ability
PT to synthesize tulipalin A, tuliposide A or tuliposide A pathway
PT intermediates.
XX
PS Example 3; Page 132; 71pp; English.
XX
CC The invention relates to genes encoding key enzymes in the biosynthesis
CC of alpha-methylene-gamma-butyrolactone (tulipalin A). Key enzymes include
CC glutamate decarboxylase, gamma-aminobutyrate aminotransferase, gamma-
CC hydroxybutyrate dehydrogenase and UDP-glucosyltransferase. The invention
CC is useful for producing tulipalin A or tuliposide A or its pathway
CC intermediates such as alpha-methylene-succinate semialdehyde, alpha-
CC methylene-gamma-aminobutyrate or alpha-methylene-gamma-hydroxybutyrate.
CC Tulipalin A sequences are used to immunise animals to produce polyclonal
CC or monoclonal antibodies with specificity for them or as targets to
CC facilitate design and/or identification of inhibitors of those enzymes
CC that may be useful as herbicides. The present sequence is a primer used
CC to clone Alstroemeria herbicide decarboxylase homologue gene (gad3)
XX
SQ Sequence 20 BP; 5 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
    Query Match      0.4%; Score 14.8; DB 1; Length 20;
    Best Local Similarity 88.9%; Pred. No. 1.7e+03;
    Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

QY 885 CAGTGTGTATGCAGGCAT 902
 DB 1 CATTGTGTATGCAGGAAT 18

RESULT 1673
 ABD24011/c
 ID ABD24011 standard; DNA; 20 BP.

XX AC ABD24011;
 XX 29-JUL-2004 (first entry)
 DT Human calmodulin 2-derived oligonucleotide SEQ ID 3023.

XX DE
 XX Human; antiseize; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX OS Homo sapiens.
 XX WO200285309-A2.
 XX 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013143.
 XX PR 24-APR-2001; 2001US-0286036P.
 XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 DR WPI; 2003-093058/08.

XX Pharmacological composition for treating asthma, has antiseize
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 3023; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, respiratory
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX SQ Sequence 20 BP; 1 A; 9 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2114 CCAGCTCTCTCAGGGGACG 2131
 DB 19 CCAGCTGCCCGGGGACG 2

RESULT 1674
 ABD31881
 ID ABD31881 standard; DNA; 20 BP.

XX AC ABD31881;
 XX 29-JUL-2004 (first entry)
 DT Human PDE4A-derived oligonucleotide SEQ ID 14092.

XX DE
 XX Human; antiseize; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX OS Homo sapiens.
 XX WO200285309-A2.
 XX 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013143.
 XX PR 24-APR-2001; 2001US-0286036P.
 XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 DR WPI; 2003-093058/08.

XX Pharmacological composition for treating asthma, has antiseize
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 14092; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, respiratory
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX Sequence 20 BP; 2 A; 6 C; 10 G; 2 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1573 CAGGTGGCCCGGGCATG 1590
 Db ||||| ||||| |||||
 1 CGGGAGGCCCGGGCATG 18
 RESULT 1675
 ABD24427
 ID ABD24427 standard; DNA; 20 BP.
 AC ABD24427;
 XX
 DT 29-JUL-2004 (first entry)
 DE AI652901-derived oligonucleotide SEQ ID 3439.
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 OS Homo sapiens.
 XX WO200285309-A2.
 PN 31-OCT-2002.
 PD 23-APR-2002; 2002WO-US013143.
 PF 24-APR-2001; 2001US-0286036P.
 PR (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 DR
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX Claim 15; SEQ ID NO 3439; 763pp; English.
 PS This invention describes a novel composition (a) a first active agent,
 CC

CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 623 CCCACATCCAGTGGCTCA 640
 Db ||||| ||||| |||||
 2 CCCACATCAAGAGGCTCA 19
 RESULT 1676
 ABD31693/C
 ID ABD31693 standard; DNA; 20 BP.
 XX ABD31693;
 AC ABD31693;
 XX
 DT 29-JUL-2004 (first entry)
 DE Human Trypsin a-derived oligonucleotide SEQ ID 13904.
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 OS Homo sapiens.
 XX WO200285309-A2.
 PN 31-OCT-2002.
 PD 23-APR-2002; 2002WO-US013143.
 PF 24-APR-2001; 2001US-0286036P.
 PR (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI

PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 13904; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 XX Sequence 20 BP; 2 A; 10 C; 5 G; 3 T; 0 U; 0 Other;
 XX
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3196 CCGAGCTGGAGGATCCC 3213
 DB 19 CTGGAGCTGGAGGAGCCC 2
 RESULT 1677
 ID ABD26843/c
 XX ABD26843; standard; DNA; 20 BP.
 XX
 XX 29-JUL-2004 (first entry)
 XX
 DE AA278764-derived oligonucleotide SEQ ID 5855.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 XX Homo sapiens.

XX
 PN WC200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 5855; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 XX Sequence 20 BP; 1 A; 1 C; 13 G; 5 T; 0 U; 0 Other;
 XX
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2159 CCCCCGCCCCCAGCA 2176
 DB 18 CCCCCAGCCCCCAGCA 1
 RESULT 1678
 ID ADH71020/c
 XX ADH71020 standard; DNA; 20 BP.
 XX
 XX AC ADH71020;
 XX
 XX 25-MAR-2004 (first entry)
 XX

DE Cosmid C215 repeat region PCR primer #1.
 XX human; T-cell associated disease; Vbeta; autoimmune disease;
 XX degenerative nervous system disease; graft versus host disease;
 KW hypersensitivity disease; infectious disease; neoplastic disease;
 KW Addison's disease; atrophic gastritis;
 KW degenerative nervous system disease; multiple sclerosis;
 KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
 KW allergy; type II hypersensitivity; Goodpasture's syndrome;
 KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
 KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
 KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
 KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
 KW breast cancer; ss; PCR; primer.
 XX
 OS Homo sapiens.
 XX
 XX US2002150891-A1.
 XX
 XX 17-OCT-2002.
 PD
 XX
 XX 05-MAR-1999; 99US-00263959.
 PF
 XX
 XX 19-SEP-1994; 94US-00309335.
 PR
 XX 19-SEP-1995; 95US-00531241.
 PR
 XX (HOOD/) HOOD L E.
 PA (ROWE/) ROWEN L.
 PA
 XX Hood LE, Rowen L;
 XX
 XX WPI; 2004-059052/06.
 DR
 XX
 XX Kit for diagnosing and treating T-cell associated diseases e.g.
 PT autoimmune, degenerative nervous system and infectious disease, comprises
 PT nucleic acid primers specifically priming and allowing amplification of a
 PT Vbeta gene.
 PT
 XX Example 6; SEQ ID NO 1214; 164pp; English.
 PS
 XX The invention relates to a kit for diagnosing and treating T-cell
 XX associated diseases which comprises a panel of nucleic acid primers
 CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetARNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases
 CC including autoimmune diseases, degenerative nervous system diseases,
 CC graft versus host disease, hypersensitivity diseases, infectious diseases
 CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
 CC atrophic gastritis. Degenerative nervous system diseases include multiple
 CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
 CC I hypersensitivities such as contact with allergens that lead to
 CC allergies, Type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by
 CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a cosmid C215 repeat region PCR
 CC primer.
 XX
 SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. NO. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3377 TTGCTGTGTGTCACAGC 3394
 DB 18 TTGCTGTGTGTCACAGC 1

RESULT 1679
 ADH48272/c
 ID ADH48272 standard; DNA; 20 BP.
 XX
 AC ADH48272;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human GRK6 DNA, antisense oligonucleotide #64.
 XX
 XX Antisense therapy; human; G protein-coupled receptor kinase 6;
 KW GPCR kinase 6; GRK6; rheumatoid arthritis; drug addition;
 KW uterine contractility; hypertension; aberrant haematopoiesis;
 KW antiinflammatory; antiarthritic; antirheumatic; hypotensive;
 KW phosphorothioate; ss.
 KW
 XX Homo sapiens.
 OS
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "This oligonucleotide has a phosphorothioate
 backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
 and 3' ends, which are 5 nucleotides in length at each
 end. All cytidine residues are 5-methylcytidines"
 FT
 XX
 PN US2003228689-A1.
 XX
 XX 11-DEC-2003.
 PD
 XX
 XX 31-MAY-2002; 2002US-00159856.
 PF
 XX
 XX 31-MAY-2002; 2002US-00159856.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Freier SM, Dobie KW;
 PI WPI; 2004-052027/05.
 DR
 XX New compounds, particularly antisense oligonucleotides targeted to a
 PT nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6, useful
 PT for treating diabetes, drug addiction, uterine contractility and
 PT hypertension.
 XX
 XX Example 15; SEQ ID NO 74; 58pp; English.
 PS
 XX The present invention relates to antisense compounds targeted to a
 CC nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6 (GRK6).
 CC The antisense compound comprises an antisense oligonucleotide that
 CC specifically hybridises with the nucleic acid and inhibits the expression
 CC of GRK6. The antisense oligonucleotide is a chimeric oligonucleotide. The
 CC antisense oligonucleotide comprises at least one modified internucleoside
 CC linkage, preferably a phosphorothioate linkage. It also comprises at
 CC least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
 CC sugar moiety. The antisense oligonucleotide further comprises at least
 CC one modified nucleobase, preferably a 5-methylcytosine. The antisense
 CC oligonucleotides are useful for the treatment of diseases such as
 CC rheumatoid arthritis, drug addiction, uterine contractility,
 CC hypertension, and diseases or conditions arising from aberrant
 CC haematopoiesis. The present sequence represents an antisense
 CC oligonucleotide used in the examples of the present invention.
 XX
 SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. NO. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3670 ATGGCTCAGGTCGCTC 3687
 DB 19 ATGGCTCAGGTCGCTC 2

phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

Homosapiens.

WO2003099215-A2.

04-DEC-2003.

20-MAY-2003; 2003WO-US016084.

20-MAY-2002; 2002US-0381857P.

(PHAA) PHARMACIA CORP.

Crosby SD, Nalseth AE;

WPI; 2004-035034/03.

New antisense compound targeted to a nucleic acid molecule encoding mammalian glucocorticoid receptor, useful for treating diabetes, obesity, cardiovascular disorder, hyperlipidemia or Cushing's syndrome.

Claim 4; SEQ ID NO 2426; 985pp; English.

The invention comprises an antisense oligonucleotides that are targeted to nucleic acids encoding a mammalian glucocorticoid receptor. The antisense oligonucleotides of the invention are useful for preventing or delaying infection, inflammation or tumour formation. The antisense oligonucleotides are also useful for treating diabetes, obesity, cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The present DNA sequence represents an antisense oligonucleotide that targets the human glucocorticoid receptor gene. NOTE: The present sequence contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

Sequence 20 BP; 6 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0

QY 1928 ACTGCACACAGCAGCTGT 1945
|||||
2 ACTGCACACAGGACCAGT 19

Db

RESULT 1682

ADH66321

ID ADH66321 standard; DNA; 20 BP.

AC ADH66321;

XX

DT 25-MAR-2004 (first entry)

XX

DE Human glucocorticoid receptor-specific antisense oligonucleotide #3155.

XX antisense oligonucleotide; glucocorticoid receptor; infection;
XX inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX

OS Homosapiens.

XX

PN WO2003099215-A2.

XX

PD 04-DEC-2003.

XX

PF 20-MAY-2003; 2003WO-US016084.

XX

PR 20-MAY-2002; 2002US-0381857P.

XX

PA (PHAA) PHARMACIA CORP.

XX

PI Crosby SD, Nalseth AE;

XX

| | |
|-----------------------|---|
| RESULT 1690 | |
| ADH65235 | |
| ID | ADH65235 standard; DNA; 20 BP. |
| XX | |
| AC | ADH65235; |
| XX | |
| DT | 25-MAR-2004 (first entry) |
| XX | |
| DE | Human glucocorticoid receptor-specific antisense oligonucleotide #2069. |
| XX | |
| KW | antisense oligonucleotide; glucocorticoid receptor; infection; |
| KW | inflammation; tumour formation; diabetes; obesity; |
| KW | cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss; |
| XX | phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE. |
| XX | |
| OS | Homo sapiens. |
| XX | |
| PN | WO200309215-A2. |
| XX | |
| PD | 04-DEC-2003. |
| XX | |
| PF | 20-MAY-2003; 2003WO-US016084. |
| XX | |
| PR | 20-MAY-2002; 2002US-0381857P. |
| XX | |
| PA | (PHAA) PHARMACIA CORP. |
| XX | |
| PI | Crosby SD, Nalseth AE; |
| XX | |
| DR | WPI; 2004-035034/03. |
| XX | |
| PT | New antisense compound targeted to a nucleic acid molecule encoding |
| PT | mammalian glucocorticoid receptor, useful for treating diabetes, obesity, |
| PT | cardiovascular disorder, hyperlipidaemia or Cushing's syndrome. |
| XX | |
| PS | Claim 4; SEQ ID NO 2069; 985pp; English. |
| XX | |
| CC | The invention comprises an antisense oligonucleotides that are targeted |
| CC | to nucleic acids encoding a mammalian glucocorticoid receptor. The |
| CC | antisense oligonucleotides of the invention are useful for preventing or |
| CC | delaying infection, inflammation or tumour formation. The antisense |
| CC | oligonucleotides are also useful for treating diabetes, obesity, |
| CC | cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The |
| CC | present DNA sequence represents an antisense oligonucleotide that targets |
| CC | the human glucocorticoid receptor gene. NOTE: The present sequence |
| CC | contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone. |
| XX | |
| SQ | Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other; |
| | |
| Query Match | 0.4%; Score 14.8; DB 1; Length 20; |
| Best Local Similarity | 88.9%; Pred. NO.1.7e+03; |
| Matches 16; | Conservative 0; Mismatches 2; Indels 0; Gaps 0 |
| | |
| QY | 1928 ACTGCACACGACCTGT 1945 |
| | |
| DB | 3 ACTGCACACGACCTGT 20 |
| | |
| RESULT 1681 | |
| ADH65592 | |
| ID | ADH65592 standard; DNA; 20 BP. |
| XX | |
| AC | ADH65592; |
| XX | |
| DT | 25-MAR-2004 (first entry) |
| XX | |
| DE | Human glucocorticoid receptor-specific antisense oligonucleotide #2426. |
| XX | |
| KW | antisense oligonucleotide; glucocorticoid receptor; infection; |
| KW | inflammation; tumour formation; diabetes; obesity; |
| KW | cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss; |

XX WPI; 2004-035034/03.
XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX Claim 4; SEQ ID NO 3155; 985pp; English.
XX The invention comprises an antisense oligonucleotide that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
SQ Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1928 ACTGCACACACGACCTGT 1945
Db 1 ACTGCACACAGGACGAGT 18
RESULT 1683
ADI09973
ID ADI09973 standard; DNA; 20 BP.
XX AC ADI09973;
XX 22-APR-2004 (first entry)
DE Rice chromosome 10 RFLP marker G4003 HindIII PCR primer, SEQ ID NO:3.
XX Rice; plant; fertility restoration; cytoplasmic male sterility; BT;
KW fertility restorer; Rf-1; chromosome 10; transgenic plant;
KW identification; regulation; pollen fertility; seed production; marker;
KW RFLP; restriction fragment length polymorphism; PCR; primer; ss.
XX Oryza sativa.
XX WO2004005515-A1.
XX 15-JAN-2004.
XX 17-MAR-2003; 2003WO-JP003154.
XX 05-JUL-2002; 2002JP-00197560.
XX (NISB) JAPAN TOBACCO INC.
XX (SYGN) SYNGENTA LTD.
XX Komori T, Takakura Y, Hiei Y, Suzuki S, Kuraya Y;
XX WPI; 2004-108821/11.
XX Rf-1 rice genomic sequences on chromosome 10 for fertility restoration to
PT rice BT-type male sterility cytoplasm.
XX Example; SEQ ID NO 3; 261pp; Japanese.
XX The invention relates to a method of restoring fertility to rice with BT
CC cytoplasmic male sterility. The invention involves transforming rice with
CC a nucleic acid encoding either the rice fertility restorer protein Rf-1
CC ADI10045 or a protein at least 70% homologous to rice Rf-1. Specifically,
CC the Rf-1 protein-encoding nucleic acids used in the method of the
CC invention are ADI09997, ADI10039-ADI10043 or ADI10050-ADI10055. The

CC invention also relates to a method of identifying rice plants and seeds
CC deficient in the Rf-1 gene using Rf-1 gene-related sequences; and a
CC method for the regulation of Rf-1-mediated fertility recovery using Rf-1
CC gene antisense oligonucleotides. The method of the invention restores
CC pollen fertility suppressed by BT cytoplasmic male sterility in rice,
CC which is useful for seed production and for investigation of the
CC mechanisms involved in sterility. Sequences ADI09971-ADI09988 and
CC ADI09999-ADI10038 represent PCR primers used in an example from the
CC invention in RFLP (restriction fragment length polymorphism) or PCR
XX analysis of rice chromosome 10 to determine markers.
SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2044 ACGGACGACTACTGGAC 2061
Db 2 ATCGACGAGTACTGAAC 19
RESULT 1684
ADJ53550/C
ID ADJ53550 standard; DNA; 20 BP.
XX AC ADJ53550;
XX 06-MAY-2004 (first entry)
DE Human PPP3CB DNA antisense oligonucleotide target region #1.
XX Human; PPP3CB; ss; antisense oligonucleotide; phosphorothioate linkage;
KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; autoimmune disorder;
KW Alzheimer's disease; immunosuppressive; nootropic; neuroprotective.
XX Homo sapiens.
XX US2004023382-A1.
XX 05-FEB-2004.
XX 31-JUL-2002; 2002US-00210723.
XX 31-JUL-2002; 2002US-00210723.
XX (ISIS-) ISIS PHARM INC.
XX Dean NM, Bennett CF, Dobie KW;
XX WPI; 2004-142663/14.
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding PPP3CB, useful for treating an autoimmune disorder,
PT or Alzheimer's disease.
XX Example 15; SEQ ID NO 86; 91pp; English.
XX The invention relates to an antisense oligonucleotide targeted to a
CC nucleic acid encoding the human PPP3CB polypeptide and inhibits
CC expression of the PPP3CB polypeptide. The antisense oligonucleotide
CC comprises at least one modified internucleoside linkage, i.e. a
CC phosphorothioate linkage, at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC comprising a 5-methylcytosine. The antisense oligonucleotides are useful
CC for inhibiting expression of the PPP3CB polypeptide and in preparation of
CC a composition for treating autoimmune disorders or Alzheimer's disease.
CC This sequence represents an antisense oligonucleotide target region of
CC the invention.
XX Sequence 20 BP; 4 A; 5 C; 9 G; 2 T; 0 U; 0 Other;
SQ Query Match 0.4%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2112 CTCACGCTCTCAGGGGA 2129
DB 18 CTCACGCTCTCGGGTGA 1

RESULT 1685
ID ADJ53478 standard; DNA; 20 BP.
XX AC ADJ53478;
XX DT 06-MAY-2004 (first entry)
XX DE Human PPP3CB DNA antisense oligonucleotide #1.
XX KW Human; PPP3CB; ss; antisense oligonucleotide; phosphorothioate linkage;
KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; autoimmune disorder;
KW Alzheimer's disease; immunosuppressive; nootropic; neuroprotective.
XX OS Homo sapiens.
XX PN US2004023382-A1.
XX PD 05-FEB-2004.
XX PF 31-JUL-2002; 2002US-00210723.
XX PR 31-JUL-2002; 2002US-00210723.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Dean NM, Bennett CF, Dobie KW;
XX WPI; 2004-142663/14.
XX PT New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding PPP3CB, useful for treating an autoimmune disorder,
PT or Alzheimer's disease.
XX Example 15; SEQ ID NO 14; 91pp; English.
XX CC The invention relates to an antisense oligonucleotide targeted to a
CC nucleic acid encoding the human PPP3CB polypeptide and inhibits
CC expression of the PPP3CB polypeptide. The antisense oligonucleotide
CC comprises at least one modified internucleoside linkage, i.e. a
CC phosphorothioate linkage, at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC comprising a 5-methylcytosine. The antisense oligonucleotides are useful
CC for inhibiting expression of the PPP3CB polypeptide and in preparation of
CC a composition for treating autoimmune disorders or Alzheimer's disease.
CC This sequence represents an antisense oligonucleotide of the invention.
XX Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;
SQ

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2112 CTCACGCTCTCAGGGGA 2129
DB 3 CTCACGCTCTCGGGTGA 20

RESULT 1686
ID ADJ60733 standard; DNA; 20 BP.
XX AC ADJ60733;
XX DT 06-MAY-2004 (first entry)

XX DE Oligonucleotide associated to PDE4A #16.
XX KW interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW airway inflammation; allergy; asthma; impeded respiration;
KW cystic fibrosis; acute respiratory distress syndrome;
KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW ss.
XX OS Homo sapiens.
XX PN WO2004011613-A2.
XX PD 05-FEB-2004.
XX PF 25-JUL-2003; 2003WO-US023509.
XX PR 29-JUL-2002; 2002US-0399076P.
XX PA (EPIC-) EPIGENESIS PHARM INC.
XX PI Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX WPI; 2004-203534/19.
XX PT Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codons and introns of respiratory disease-relevant genes e.g.,
PT CCRI, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT disease e.g., asthma.
XX Claim 2; SEQ ID NO 1589; 85pp; English.
XX CC The present invention relates to an oligonucleotide anti-sense to e.g.,
CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC end of nucleic acid target comprising gene(s) chosen from e.g.
CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC oligonucleotide and optionally surfactant operatively linked to the
CC oligonucleotide. The method is useful for preventing or treating a
CC respiratory or lung disease, which involves administering to the airways
CC of a subject an effective amount of an inhibitor. The oligonucleotide is
CC useful for production of a medicament for the prevention and/or treatment
CC of a respiratory or lung disease. The respiratory or lung disease is
CC chosen from airway inflammation, allergy(ies), asthma, impeded
CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC obstruction. The present sequence represents an oligonucleotide of the
XX invention.
SQ Sequence 20 BP; 2 A; 6 C; 10 G; 2 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1573 CAGGTGCGCCGGGCATG 1590
DB 1 CCGGAGGCGCCGGGCATG 18

RESULT 1687
ID ADJ60541/c standard; DNA; 20 BP.
XX AC ADJ60541;
XX DT 06-MAY-2004 (first entry)
XX DE Oligonucleotide associated to Tryptase-a #77.
XX KW interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW airway inflammation; allergy; asthma; impeded respiration;

KW cystic fibrosis; acute respiratory distress syndrome;
KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW ss.
XX
OS Homo sapiens.
XX
PN WO2004011613-A2.
XX
XX 05-FEB-2004.
XX
XX 25-JUL-2003; 2003WO-US023509.
XX
XX 29-JUL-2002; 2002US-0399076P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
PI WPI; 2004-203534/19.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codons and introns of respiratory disease-relevant genes e.g.,
PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT disease e.g., asthma.
XX
XX Claim 2; SEQ ID NO 1397; 85pp; English.
XX
XX The present invention relates to an oligonucleotide anti-sense to e.g.,
CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC end of nucleic acid target comprising gene(s) chosen from e.g.
CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC oligonucleotide and optionally surfactant operatively linked to the
CC oligonucleotide. The method is useful for preventing or treating a
CC respiratory or lung disease, which involves administering to the airways
CC of a subject an effective amount of an inhibitor. The oligonucleotide is
CC useful for production of a medicament for the prevention and/or treatment
CC of a respiratory or lung disease. The respiratory or lung disease is
CC chosen from airway inflammation, allergy(ies), asthma, impeded
CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC obstruction. The present sequence represents an oligonucleotide of the
CC invention.
XX
XX Sequence 20 BP; 2 A; 10 C; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3196 CCGAGCTGGAGGATCCC 3213
Db 19 CTGGAGCTGGAGGAGCCC 2
RESULT 1688
ADJ53390/C
ID ADJ53390 standard; DNA; 20 BP.
XX
XX ADJ53390;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human G protein-coupled receptor 6 DNA antisense oligonucleotide #39.
DE
XX Human; G protein-coupled receptor 6; GPCR-6; ss;
KW antisense oligonucleotide; phosphorothioate linkage;
KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; metabolic disorder;
KW aberrant signal transduction; brain tissue; neuronal disorder;
KW motor disorder; sensory disorder; psychiatric disorder;
KW behavioural disorder; drug addiction; chemical addiction; neuroleptic.
XX

OS Homo sapiens.
XX
PN US2004023380-A1.
XX
XX 05-FEB-2004.
XX
XX 31-JUL-2002; 2002US-00210479.
XX
XX 31-JUL-2002; 2002US-00210479.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Dobie KW;
PI WPI; 2004-142661/14.
XX
XX Novel antisense compound targeted to nucleic acids encoding G protein-
PT coupled receptor 6 (GPCR-6), useful for treating animal having disease
PT associated with GPCR-6 e.g. metabolic, neuronal, motor, sensory or
PT behavioural disorders.
XX
XX Example 15; SEQ ID NO 50; 54pp; English.
XX
XX The invention relates to an antisense oligonucleotide targeted to a
CC nucleic acid encoding the human G protein-coupled receptor 6 (GPCR-6),
CC which specifically hybridises with the nucleic acid encoding the GPCR-6
CC and inhibits expression of the GPCR-6. The antisense oligonucleotide
CC comprises at least one modified internucleoside linkage, i.e. a
CC phosphorothioate linkage, at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC comprising a 5-methylcytosine. The antisense oligonucleotides are useful
CC for inhibiting expression of the GPCR-6 and in preparation of a
CC composition for treating a disease or condition associated with GPCR-6,
CC e.g., a metabolic disorder, aberrant signal transduction in brain tissue,
CC a neuronal, motor, sensory, psychiatric or behavioural disorder or drug
CC or chemical addiction. This sequence represents an antisense
CC oligonucleotide of the invention.
XX
XX Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2015 ACCTGGACCGTGCTTA 2032
Db 20 ACTTGGACCGTGCTTA 3
RESULT 1689
ADJ53452
ID ADJ53452 standard; DNA; 20 BP.
XX
XX ADJ53452;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human GPCR-6 DNA antisense oligonucleotide target region #23.
DE
XX Human; G protein-coupled receptor 6; GPCR-6; ss;
KW antisense oligonucleotide; phosphorothioate linkage;
KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; metabolic disorder;
KW aberrant signal transduction; brain tissue; neuronal disorder;
KW motor disorder; sensory disorder; psychiatric disorder;
KW behavioural disorder; drug addiction; chemical addiction; neuroleptic.
XX
XX Homo sapiens.
OS
XX
PN US2004023380-A1.
XX
XX 05-FEB-2004.
XX
XX 31-JUL-2002; 2002US-00210479.
XX

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XX PR 31-JUL-2002; 2002US-00210479.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Monia BP, Dobie KW;
XX PR WPI; 2004-142661/14.
XX DR
XX PT Novel antisense compound targeted to nucleic acids encoding G protein-
XX PT coupled receptor 6 (GPCR-6), useful for treating animal having disease
XX PT associated with GPCR-6 e.g. metabolic, neuronal, motor, sensory or
XX PT behavioral disorders.
XX PS Example 15; SEQ ID NO 112; 54pp; English.
XX CC The invention relates to an antisense oligonucleotide targeted to a
XX CC nucleic acid encoding the human G protein-coupled receptor 6 (GPCR-6),
XX CC which specifically hybridises with the nucleic acid encoding the GPCR-6
XX CC and inhibits expression of the GPCR-6. The antisense oligonucleotide
XX CC comprises at least one modified internucleoside linkage, i.e. a
XX CC phosphorothioate linkage, at least one modified sugar moiety, preferably
XX CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
XX CC comprising a 5-methylcytosine. The antisense oligonucleotides are useful
XX CC for inhibiting expression of the GPCR-6 and in preparation of a
XX CC composition for treating a disease or condition associated with GPCR-6,
XX CC e.g., a metabolic disorder, aberrant signal transduction in brain tissue,
XX CC a neuronal, motor, sensory, psychiatric or behavioural disorder or drug
XX CC or chemical addiction. This sequence represents an antisense
XX CC oligonucleotide target region of the invention.
XX SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2015 ACCTGGACCGTGTCCTTA 2032
DB 1 ACTTGGACCGTGTCCTTA 18

RESULT 1690
ADJ45357/C
ID ADJ45357 standard; DNA; 20 BP.
AC ADJ45357;
XX DT 06-MAY-2004 (first entry)
XX DE Hepatoma-derived growth factor antisense oligo seqid 127.
XX KW cytostatic; endocrine; hepatoma-derived growth factor inhibitor;
XX KW hepatoma-derived growth factor; metabolic disorder; hyperproliferative;
XX KW human; ss; antisense oligonucleotide.
XX OS Homo sapiens.
XX PH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Phosphorothioate backbone. All cytidines
XX FT are 5-methylcytidines"
XX FT modified_base 1..5
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX FT modified_base 15..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX FT
```

```
PN US2004023379-A1.
XX PD 05-FEB-2004.
XX PF 31-JUL-2002; 2002US-00210429.
XX PR 31-JUL-2002; 2002US-00210429.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Bennett CF, Dobie KW;
XX PR WPI; 2004-142660/14.
XX DR
XX PT New compound, particularly an antisense oligonucleotide targeted to a
XX PT nucleic acid encoding a hepatoma-derived growth factor, useful for
XX PT treating a hyperproliferative disorder e.g. cancer, or a metabolic
XX PT disorder.
XX PS Example 15; SEQ ID NO 127; 61pp; English.
XX CC The invention describes a compound 8-80 nucleobases in length targeted
XX CC to, and which specifically hybridises with a nucleic acid molecule
XX CC encoding hepatoma-derived growth factor, and inhibits the expression of
XX CC hepatoma-derived growth factor. The compound, composition and methods are
XX CC useful for treating a disease or condition associated with hepatoma-
XX CC derived growth factor, such as a metabolic disorder, or a
XX CC hyperproliferative disorder, e.g. cancer, which is selected from
XX CC hepatoma, leiomyoma, esophageal cancer or ovarian cancer. They are also
XX CC useful in research and diagnostics for modulating the expression of
XX CC hepatoma-derived growth factor. This sequence represents a human hepatoma
XX CC -derived growth factor antisense oligonucleotide.
XX SQ Sequence 20 BP; 8 A; 1 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 920 GCTTCTTCTCTGTCATCC 937
DB 18 GCCTCTTCTCTGTCATCC 1

RESULT 1691
ADJ45286
ID ADJ45286 standard; DNA; 20 BP.
XX AC ADJ45286;
XX DT 06-MAY-2004 (first entry)
XX DE Hepatoma-derived growth factor antisense oligo seqid 56.
XX KW cytostatic; endocrine; hepatoma-derived growth factor inhibitor;
XX KW hepatoma-derived growth factor; metabolic disorder; hyperproliferative;
XX KW human; ss; antisense oligonucleotide.
XX OS Homo sapiens.
XX PH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Phosphorothioate backbone. All cytidines
XX FT are 5-methylcytidines"
XX FT modified_base 1..5
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX FT modified_base 15..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT
```

```

FT  /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
PN  US2004023379-A1.
XX
XX  05-FEB-2004.
PD
XX
XX  31-JUL-2002; 2002US-00210429.
PF
XX  31-JUL-2002; 2002US-00210429.
PR
XX  (ISIS-) ISIS PHARM INC.
XX
XX  Bennett CF, Dobie KW;
PI
XX  WPI; 2004-142660/14.
DR
XX
XX  New compound, particularly an antisense oligonucleotide targeted to a
PT  nucleic acid encoding a hepatoma-derived growth factor, useful for
PT  treating a hyperproliferative disorder e.g. cancer, or a metabolic
PT  disorder.
XX
XX  Example 15; SEQ ID NO 56; 61pp; English.
PS
XX  The invention describes a compound 8-80 nucleobases in length targeted
XX  to, and which specifically hybridises with a nucleic acid molecule
XX  encoding hepatoma-derived growth factor, and inhibits the expression of
XX  hepatoma-derived growth factor. The compound, composition and methods are
XX  useful for treating a disease or condition associated with hepatoma-
XX  derived growth factor, such as a metabolic disorder, or a
XX  hyperproliferative disorder, e.g. cancer, which is selected from
XX  hepatoma, leiomyoma, esophageal cancer or ovarian cancer. They are also
XX  useful in research and diagnostics for modulating the expression of
XX  hepatoma-derived growth factor. This sequence represents a human hepatoma
XX  -derived growth factor antisense oligonucleotide.
XX
XX  Sequence 20 BP; 2 A; 9 C; 1 G; 8 T; 0 U; 0 Other;
SQ
XX
XX  Query Match 0.4%; Score 14.8; DB 1; Length 20;
XX  Best Local Similarity 88.9%; Pred. No. 1.7e+03;
XX  Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY  920 GCCTCTCTCTGTCATCC 937
DB  3 GCCTCTCTCTCTTCATCC 20
XX
XX  RESULT 1692
ADJ26848
ID  ADJ26848 standard; DNA; 20 BP.
XX
XX  ADJ26848;
AC
XX
XX  20-MAY-2004 (first entry)
DT
XX
XX  Human Centromere protein B antisense oligonucleotide, ISIS #156869.
DE
XX
XX  Centromere protein B; hyperproliferative disorder; cancer;
XX  autoimmune disorder; rheumatoid arthritis; scleroderma;
XX  Raynaud's syndrome; systemic lupus erythematosus; gene therapy;
XX  cytostatic; immunosuppressive; dermatological; antiinflammatory; human;
XX  antisense; phosphorothioate backbone; ss.
XX
XX  Homo sapiens.
OS
XX  Synthetic.
XX
XX  Key Location/Qualifiers
XX  modified_base 1..20
XX  /mod_base= OTHER
XX  /note= "phosphorothioate backbone where all cytidines are
XX  5-methylcytidines"
XX  modified_base 1..5
XX  /tag= a

```

```

FT  /mod_base= OTHER
FT  /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT  modified_base 16..20
FT  /tag= c
FT  /mod_base= OTHER
FT  /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
XX  US2003232443-A1.
PN
XX  18-DEC-2003.
XX
XX  18-JUN-2002; 2002US-00176277.
PF
XX
XX  18-JUN-2002; 2002US-00176277.
PR
XX  (ISIS-) ISIS PHARM INC.
XX
XX  Bennett CF, Dobie KW;
PI
XX  WPI; 2004-052175/05.
DR
XX
XX  New antisense oligonucleotide targeted to a nucleic acid encoding
PT  Centromere protein B, useful for treating a disease, e.g. cancer,
PT  rheumatoid arthritis, scleroderma, Raynaud's syndrome or systemic lupus
PT  erythematosus.
XX
XX  Example 15; SEQ ID NO 17; 47pp; English.
PS
XX  The present invention relates to antisense compounds, compositions and
XX  methods for modulating the expression of Centromere protein B. The
XX  compound, composition and methods are useful for treating diseases or
XX  conditions associated with Centromere protein B, such as
XX  hyperproliferative disorders (e.g. cancer), autoimmune disorders e.g.
XX  rheumatoid arthritis, scleroderma, Raynaud's syndrome or systemic lupus
XX  erythematosus. The invention is also useful in gene therapy. The present
XX  sequence is human Centromere protein B antisense oligonucleotide used in
XX  the exemplification of the invention.
XX
XX  Sequence 20 BP; 5 A; 5 C; 9 G; 1 T; 0 U; 0 Other;
SQ
XX
XX  Query Match 0.4%; Score 14.8; DB 1; Length 20;
XX  Best Local Similarity 88.9%; Pred. No. 1.7e+03;
XX  Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY  1262 AGGACCGCGCGCCCAAGC 1279
DB  1 AGGACTGGCGCAGCCAAGC 18
XX
XX  RESULT 1693
ADJ18466
ID  ADJ18466 standard; DNA; 20 BP.
XX
XX  ADJ18466;
AC
XX
XX  20-MAY-2004 (first entry)
DT
XX
XX  Antisense DNA oligo used to modulate human LRH1 expression SeqID 3016.
DE
XX
XX  human, ss; liver related homologue-1; LRH1; NR5A2; antisense;
XX  phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
XX  low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
XX  gall stone; triglyceridaemia; obesity; hepatitis;
XX  hepatocellular carcinoma; aromatase; cytostatic; antilipaeamic;
XX  antiarteriosclerotic; anorectic; hepatotropic; litholytic;
XX  antiinflammatory; virucidal.
XX
XX  Homo sapiens.
OS
XX  Synthetic.
XX
XX  Key Location/Qualifiers
XX  modified_base 1..20
XX  /tag= b

```

```
FT /mod_base= OTHER
FT /label= OTHER= phosphorothioate backbone
FT modified_base
FT 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
FT modified_base
FT 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
XX WO2004003201-A2.
XX
XX 08-JAN-2004.
XX
XX 01-JUL-2003; 2003WO-US020865.
XX
XX 01-JUL-2002; 2002US-0392813P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Kane CD;
XX
XX WPI; 2004-083058/08.
XX
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
XX related homologue-1 (LRH1), useful for treating breast cancer,
XX dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
XX Example 15; SEQ ID NO 3016; 909pp; English.
XX
XX This invention relates to novel antisense compounds useful for modulating
XX the expression of liver related homologue-1 (LRH1) and splice variants
XX thereof. Specifically, it refers to compositions 8-30 nucleobases in
XX length that target a portion of an active site on the nucleic acid
XX molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
XX nuclear receptor protein that functions as a tissue specific
XX transcription factor. The present invention describes antisense
XX oligonucleotides that comprise at least one modified internucleoside
XX linkage, a phosphorothioate linkage; at least one modified sugar moiety,
XX a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
XX methylcytidine. These antisense compounds are useful for treating or
XX diagnosing a disease associated with LRH1, such as breast cancer,
XX dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
XX LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
XX triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
XX hepatitis, as well as hepatocellular carcinoma or a condition associated
XX with aromatase activity. Accordingly, these compositions exhibit
XX cytostatic, antilipaeamic, antiarteriosclerotic, anorectic, hepatotropic,
XX litholytic, antiinflammatory and virucidal activities. This
XX oligonucleotide sequence is an antisense DNA oligo used to modulate the
XX expression of the human LRH1 protein of the invention.
XX
XX Sequence 20 BP; 3 A; 13 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred.No. 1.7e+03;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 318 CCCCACTCCCTCATCTC 335
XX |||||
XX Db 3 CCCCACTCCCAATCTC 20
XX
XX RESULT 1694
XX ADJ17693
XX ID ADJ17693 standard; DNA; 20 BP.
XX
XX AC ADJ17693;
XX
XX 20-MAY-2004 (first entry)
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```
XX Antisense DNA oligo used to modulate human LRH1 expression SeqID 2243.
XX
XX human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
XX phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
XX low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
XX gall stone; triglyceridaemia; obesity; hepatitis;
XX hepatocellular carcinoma; aromatase; cytostatic; antilipaeamic;
XX antiarteriosclerotic; anorectic; hepatotropic; litholytic;
XX antiinflammatory; virucidal.
XX
XX Homo sapiens.
XX OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /label= OTHER= phosphorothioate backbone
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
XX cytidine nucleobases are 5-methylcytidine."
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
XX cytidine nucleobases are 5-methylcytidine."
XX
XX WO2004003201-A2.
XX
XX 08-JAN-2004.
XX
XX 01-JUL-2003; 2003WO-US020865.
XX
XX 01-JUL-2002; 2002US-0392813P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Kane CD;
XX
XX WPI; 2004-083058/08.
XX
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
XX related homologue-1 (LRH1), useful for treating breast cancer,
XX dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
XX Example 15; SEQ ID NO 2243; 909pp; English.
XX
XX This invention relates to novel antisense compounds useful for modulating
XX the expression of liver related homologue-1 (LRH1) and splice variants
XX thereof. Specifically, it refers to compositions 8-30 nucleobases in
XX length that target a portion of an active site on the nucleic acid
XX molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
XX nuclear receptor protein that functions as a tissue specific
XX transcription factor. The present invention describes antisense
XX oligonucleotides that comprise at least one modified internucleoside
XX linkage, a phosphorothioate linkage; at least one modified sugar moiety,
XX a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
XX methylcytidine. These antisense compounds are useful for treating or
XX diagnosing a disease associated with LRH1, such as breast cancer,
XX dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
XX LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
XX triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
XX hepatitis, as well as hepatocellular carcinoma or a condition associated
XX with aromatase activity. Accordingly, these compositions exhibit
XX cytostatic, antilipaeamic, antiarteriosclerotic, anorectic, hepatotropic,
XX litholytic, antiinflammatory and virucidal activities. This
XX oligonucleotide sequence is an antisense DNA oligo used to modulate the
XX expression of the human LRH1 protein of the invention.
XX
XX Sequence 20 BP; 3 A; 12 C; 0 G; 5 T; 0 U; 0 Other;
```

```
Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 318 CCCCACTCCCTCCATCTC 335
DB 2 CCCCACTCCCAATCTC 19

RESULT 1695
ADM28947
ID ADM28947 standard; DNA; 20 BP.
XX AC
XX ADM28947;
XX
XX 20-MAY-2004 (first entry)
XX
XX Primer GLP-5', seq id 8.
XX
XX Gene therapy; adipocyte; secreted protein; insulin;
KW glucagon-like peptide 1; bone marrow cell; hepatocyte; PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX WO2003106663-A1.
XX
XX 24-DEC-2003.
XX
XX 18-JUN-2003; 2003WO-JP007721.
XX
XX 18-JUN-2002; 2002JP-00177648.
XX
XX 19-AUG-2002; 2002JP-00237974.
XX
XX (EISA ) EISAI CO LTD.
XX
XX Ito M, Saito Y;
XX
XX WPI; 2004-071560/07.
XX
XX Primary culture of adipocytes for gene therapy useful in treatment of
XX diabetes.
XX
XX Example 4; SEQ ID NO 8; 68pp; Japanese.
XX
XX The invention relates to the primary culture of adipocytes for gene
XX therapy that stably carry a foreign secreted protein. Further disclosed
XX is a method for producing the adipocytes, a transplant composition for
XX gene therapy containing the cells, and a method for gene therapy and
XX animals with the transplanted adipocytes. The proteins are preferably
XX insulin or glucagon-like peptide 1. The cells of the invention are useful
XX for gene therapy, particularly as a substitute for bone marrow cells or
XX hepatocytes. The primarily cultured adipocytes are useful for ex vivo
XX gene therapy. The current sequence represents a primer used in an example
XX from the invention.
XX
XX Sequence 20 BP; 2 A; 8 C; 4 G; 6 T; 0 U; 0 Other;

Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2238 CCACCTGCTGCTGGTGC 2255
DB 3 CCACCATGCTGCTGCTGC 20

RESULT 1696
ADK77147
ID ADK77147 standard; DNA; 20 BP.
XX AC
XX ADK77147;
XX

Query Match      0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1148 AGCTGCTCGCCGCCCA 1165
DB 1 AGCTGCATGCCGCCACA 18

RESULT 1697
ADK78457
ID ADK78457 standard; DNA; 20 BP.
XX AC
XX ADK78457;
XX
XX 20-MAY-2004 (first entry)
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #5791.
XX
XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
XX infantile epilepsy; ataxia; ss.
XX
XX Synthetic.
XX
```

DT 20-MAY-2004 (first entry)

XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #4481.

DE Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;

XX diabetic neuropathy; arthritic pain; migraine headache;

KW infantile epilepsy; ataxia; ss.

XX Synthetic.

OS

PN WO2004016754-A2.

XX

XX 26-FEB-2004.

PD

XX

PF 14-AUG-2003; 2003WO-US025465.

XX

PR 14-AUG-2002; 2002US-0403416P.

XX

PA (PHAA) PHARMACIA CORP.

XX

XX Robertds SL;

PI

XX WPI; 2004-203785/19.

DR

XX

XX New antisense compound targeted to a nucleic acid molecule encoding

PT Nav1.3, useful for treating a disease or condition associated

PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure

PT disorder, or ataxia.

XX

PS Claim 4; SEQ ID NO 4481; 417pp; English.

XX

XX The present invention relates to an antisense compound targeted to a

CC nucleic acid molecule encoding Nav1.3, where the antisense compound

CC specifically hybridizes with and inhibits the expression of Nav1.3. The

CC compound and composition are useful for treating a disease or condition

CC associated with Nav1.3, e.g. pain including but not limited to

CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,

CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,

CC pain from burns, migraine headache, cluster headache, mild-to-moderate

CC headache; seizure disorder such as childhood seizure disorder, including

CC but not limited to neonatal or infantile epilepsy; or ataxia. The present

CC sequence represents a chimeric phosphorothioate oligonucleotide with

CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of

CC human Nav1.3 expression, the oligonucleotides are designed to target

CC different regions of the human Nav1.3 RNA.

XX

SQ Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 1.7e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1148 AGCTGCTCGCCGCCCA 1165

DB 1 AGCTGCATGCCGCCACA 18

RESULT 1697

ADK78457

ID ADK78457 standard; DNA; 20 BP.

XX

XX ADK78457;

AC

XX

XX 20-MAY-2004 (first entry)

DT

XX

XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #5791.

DE

XX

XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;

KW diabetic neuropathy; arthritic pain; migraine headache;

KW infantile epilepsy; ataxia; ss.

XX

XX Synthetic.

XX

PN WO2004016754-A2.
 XX 26-FEB-2004.
 XX 14-AUG-2003; 2003WO-US025465.
 PF 14-AUG-2002; 2002US-0403416P.
 XX (PHAA) PHARMACIA CORP.
 XX Roberds SL;
 XX WPI; 2004-203785/19.
 XX
 XX New antisense compound targeted to a nucleic acid molecule encoding
 PT Navi1.3, useful for treating a disease or condition associated
 PT with Navi1.3, e.g. pain, seizure disorder such as childhood seizure
 PT disorder, or ataxia.
 XX
 XX Claim 4; SEQ ID NO 5791; 417pp; English.
 XX
 XX The present invention relates to an antisense compound targeted to a
 CC nucleic acid molecule encoding Navi1.3, where the antisense compound
 CC specifically hybridizes with and inhibits the expression of Navi1.3. The
 CC compound and composition are useful for treating a disease or condition
 CC associated with Navi1.3, e.g. pain including but not limited to
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate
 CC headache; seizure disorder such as childhood seizure disorder, including
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
 CC sequence represents a chimeric phosphorothioate oligonucleotide with
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
 CC human Navi1.3 expression, the oligonucleotides are designed to target
 CC different regions of the human Navi1.3 RNA.
 XX
 XX Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1147 GAGCTGCTCCGACCC 1164
 Db 3 GAGCTGCTCCGACCCAC 20
 RESULT 1698
 ADL24187
 ID ADL24187 standard; DNA; 20 BP.
 XX
 XX ADL24187;
 AC
 XX 20-MAY-2004 (first entry)
 DT
 XX Human NOVX cDNA PCR primer #24.
 DE
 XX Human; NOVX; PCR; ss; G protein-coupled receptor; GPCR; cardiomyopathy;
 KW atherosclerosis; hypertension; congenital heart defect; aortic stenosis;
 KW atrial septal defect; ASD; atrioventricular canal defect;
 KW ductus arteriosus; pulmonary stenosis; subaortic stenosis;
 KW ventricular septal defect; VSD; tuberous sclerosis; scleroderma; obesity;
 KW adrenoleukodystrophy; congenital adrenal hyperplasia; prostate cancer;
 KW neoplasm; adenocarcinoma; lymphoma; uterine cancer; haemophilia;
 KW hypercoagulability; idiopathic thrombocytopenia purpura;
 KW immunodeficiency; graft-versus-host disease; AIDS; bronchial asthma;
 KW Crohn's disease; multiple sclerosis;
 KW Albright's hereditary osteodystrophy; diabetes; infectious diseases;
 KW anorexia; neurodegenerative disorder; Alzheimer's disease;
 KW Parkinson's disease; haematopoietic disorder; metabolic disorder; primer.
 XX Homo sapiens.
 OS
 XX

PN US2004002120-A1.
 XX 01-JAN-2004.
 XX 07-MAR-2002; 2002US-00094886.
 XX
 XX 08-MAR-2001; 2001US-0274194P.
 PR 08-MAR-2001; 2001US-0274281P.
 PR 08-MAR-2001; 2001US-0274322P.
 PR 09-MAR-2001; 2001US-0274849P.
 PR 12-MAR-2001; 2001US-0275235P.
 PR 13-MAR-2001; 2001US-0275578P.
 PR 13-MAR-2001; 2001US-0275579P.
 PR 14-MAR-2001; 2001US-0275601P.
 PR 14-MAR-2001; 2001US-0276000P.
 PR 16-MAR-2001; 2001US-0276776P.
 PR 19-MAR-2001; 2001US-0276994P.
 PR 20-MAR-2001; 2001US-0277239P.
 PR 20-MAR-2001; 2001US-0277327P.
 PR 20-MAR-2001; 2001US-0277338P.
 PR 21-MAR-2001; 2001US-0277791P.
 PR 22-MAR-2001; 2001US-0277833P.
 PR 23-MAR-2001; 2001US-0278152P.
 PR 26-MAR-2001; 2001US-0278894P.
 PR 27-MAR-2001; 2001US-0278999P.
 PR 30-MAR-2001; 2001US-0279036P.
 PR 30-MAR-2001; 2001US-0280233P.
 PR 02-APR-2001; 2001US-0280802P.
 PR 02-MAY-2001; 2001US-0288052P.
 PR 02-MAY-2001; 2001US-0288066P.
 PR 02-MAY-2001; 2001US-0288228P.
 PR 17-MAY-2001; 2001US-0291766P.
 PR 07-JUN-2001; 2001US-0296693P.
 PR 08-JUN-2001; 2001US-0296856P.
 PR 05-JUL-2001; 2001US-0303230P.
 PR 05-JUL-2001; 2001US-0303237P.
 PR 08-AUG-2001; 2001US-0310913P.
 PR 13-AUG-2001; 2001US-0311978P.
 PR 14-AUG-2001; 2001US-0312191P.
 PR 16-AUG-2001; 2001US-0312916P.
 PR 17-AUG-2001; 2001US-0313182P.
 PR 20-AUG-2001; 2001US-0313626P.
 PR 21-AUG-2001; 2001US-0314018P.
 PR 27-AUG-2001; 2001US-0315227P.
 PR 10-SEP-2001; 2001US-0318403P.
 PR 14-SEP-2001; 2001US-0322296P.
 PR 14-SEP-2001; 2001US-0322360P.
 PR 27-SEP-2001; 2001US-0325378P.
 PR 09-NOV-2001; 2001US-0332486P.
 PR 09-NOV-2001; 2001US-0345399P.
 XX
 XX (KEKU/) KEKUDA R.
 PA (TCHE/) TCHERNEV V T.
 PA (LIUX/) LIU X.
 PA (SPVT/) SPYTEK K A.
 PA (PATT/) PATTURAJAN M.
 PA (BURG/) BURGESS C E.
 PA (VERN/) VERNET C A M.
 PA (LILL/) LI L.
 PA (GORM/) GORMAN L.
 PA (MALY/) MALYANKAR U M.
 PA (BOLD/) BOLDOG F L.
 PA (GUOX/) GUO X.
 PA (SHEN/) SHENOY S G.
 PA (PADI/) PADIGARU M.
 PA (TAUP/) TAUPIER R J.
 PA (MILL/) MILLER C E.
 PA (CASM/) CASMAN S J.
 PA (PENA/) PENA C E A.
 PA (GANG/) GANGOLLI E A.
 PA (GUSE/) GUSEV V Y.
 PA (SMIT/) SMITHSON G.

PA (ZERH/) ZERHUSEN B D.
 PA (GERL/) GERLACH V.
 PA (POCH/) POCHART P F.
 PA (FERN/) FERNANDES E R.
 PA (SHIM/) SHINKETS R A.
 PA (RAST/) RASTELLI L.
 PA (SPAD/) SPADERNA S K.
 PA (LARO/) LAROCHELLE W J.
 PA (ZHON/) ZHONG M.
 PA (KHRA/) KHRAMTSOV N V.
 PA (VOSS/) VOSS E Z.
 PA (HERR/) HERRMANN J L.
 XX
 PI Kekuda R, Tchernev VT, Liu X, Spytek KA, Patturajan M;
 PI Burgess CE, Vernet CM, Li L, Gorman L, Malyankar UM, Boldog FL;
 PI Guo X, Shenoy SG, Padigar M, Taupier RJ, Miller CE, Casman SJ;
 PI Pena CE, Gangolli EA, Gusev VV, Smithson G, Zerhusen BD, Gerlach V;
 PI Pochart PF, Fernandes ER, Shinkets RA, Rastelli L, Spaderna SK;
 PI Larochelle WJ, Zhong M, Khrantsov NV, Voss EZ, Herrmann JL;
 XX
 DR WPI; 2004-212692/20.
 XX
 XX Novel isolated G protein-coupled receptor polypeptides, referred as NOVX,
 PT useful for treating scleroderma, obesity, congenital adrenal hyperplasia,
 PT prostate cancer, hemophilia, AIDS, bronchial asthma, Crohn's disease.
 XX
 PS Example 47; SEQ ID NO 232; 287pp; English.
 XX
 CC The invention relates to human G protein-coupled receptor-related (GPCR-
 CC related) polypeptides (designated NOVX) and the polynucleotides encoding
 CC them. The polypeptides and polynucleotides are useful as therapeutics in
 CC the manufacture of medicaments for treating syndromes associated with
 CC human diseases. The sequences are useful for treating a disorder
 CC associated with aberrant NOVX expression or activity such as
 CC cardiomyopathy, atherosclerosis, hypertension, congenital heart defects,
 CC aortic stenosis, atrial septal defect (ASD), atrioventricular canal
 CC defect, ductus arteriosus, pulmonary stenosis, subaortic stenosis,
 CC ventricular septal defect (VSD), tuberosus sclerosis, scleroderma,
 CC obesity, adrenoleukodystrophy, congenital adrenal hyperplasia, prostate
 CC cancer, neoplasm, adenocarcinoma, lymphoma, uterine cancer, haemophilia,
 CC hypercoagulability, idiopathic thrombocytopenia purpura,
 CC immunodeficiencies, graft-versus-host disease, AIDS, bronchial asthma,
 CC Crohn's disease, multiple sclerosis, Albright's hereditary
 CC osteodystrophy, diabetes, infectious diseases, anorexia,
 CC neurodegenerative disorders, Alzheimer's disease, Parkinson's disease,
 CC immune disorders, haematopoietic disorders and metabolic disorders. This
 CC sequence represents a PCR primer used in analysis of human NOVX sequences
 CC of the invention.
 XX
 SQ Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2008 GTGGAGGACCTGGACCGT 2025
 Db 3 GAGGAGGACCTGGACAGT 20
 RESULT 1699
 ADM79596/C
 ID ADM79596 standard; cDNA; 20 BP.
 XX
 AC ADM79596;
 XX
 XX cDNA array production-related PCR primer SeqID6.
 DT 03-JUN-2004 (first entry)
 XX
 DE cDNA array; support; functional group; mismatch detection;
 XX virus identification; bacterium identification; p53; PCR; primer; ss.
 KW
 XX

OS Homo sapiens.
 XX JP2004069488-A.
 XX
 PD 04-MAR-2004.
 XX
 XX 06-AUG-2002; 2002JP-00228971.
 XX
 XX 06-AUG-2002; 2002JP-00228971.
 XX
 PA (CANO) CANON KK.
 XX
 XX WPI; 2004-308703/29.
 XX
 XX Producing cDNA array on support with introduction of the coupling group
 PT using a PCR primer containing the group.
 XX
 XX Example 1; SEQ ID NO 6; 13pp; Japanese.
 PS
 XX This invention relates to a novel method of producing a cDNA array on a
 CC support, which involves introducing a functional group to one edge part
 CC of 2 or more types of single stranded cDNA (known sequence) for fixing to
 CC a support and combining each strand of cDNAs with a support through a
 CC functional group for binding such that each strand of cDNA is mutually
 CC isolated and fixed. The method is useful for preparing a cDNA array,
 CC which is useful for detecting mismatches, or for identifying (for
 CC example) viruses or bacteria. The present sequence is that of a PCR
 CC primer which was used for amplification of a region of the human p53 gene
 CC in the exemplification of the invention.
 XX
 SQ Sequence 20 BP; 3 A; 3 C; 10 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2695 CCACCTTCCACCCCTGGCC 2712
 Db 19 CCACCTTCCACCCCTGCAC 2
 RESULT 1700
 ADM74292
 ID ADM74292 standard; DNA; 20 BP.
 XX
 AC ADM74292;
 XX
 DT 03-JUN-2004 (first entry)
 XX
 XX Human NOVX protein-related PCR primer SeqID133.
 DE
 DE NOVX; antiarteriosclerotic; cytostatic; antidiabetic; antiparkinsonian;
 KW neuroprotective; nootropic; antiaesthetic; antiallergic;
 KW immunosuppressive; antiarthritic; antirheumatic; osteopathic;
 KW dermatological; antiinflammatory; anti-HIV; hypotensive; haemostatic;
 KW anorectic; gastrointestinal-gen; antiulcer; antimicrobial; antipsoriatic;
 KW neuroleptic; antidepressant; anabolic; eating disorders-gen;
 KW antiinfertility; nephrotropic; gene therapy; antisense gene therapy;
 KW human disease; atherosclerosis; cancer; diabetes; Alzheimer's disease;
 KW Parkinson's disease; asthma; allergy; immune disease;
 KW graft-versus-host disease; osteoarthritis; rheumatoid arthritis;
 KW scleroderma; systemic lupus erythematosus; AIDS; hypertension;
 KW haemophilia; idiopathic thrombocytopenic purpura; obesity;
 KW inflammatory bowel disease; Crohn's disease; ulcerative colitis;
 KW infectious disease; psoriasis; multiple sclerosis; schizophrenia;
 KW depression; anorexia; fertility; glomerulonephritis; chromosome mapping;
 KW tissue typing; PCR; primer; ss; human.
 XX
 OS Homo sapiens.
 XX
 XX WO2004015079-A2.
 PN
 XX 19-FEB-2004.
 PD

XX 07-AUG-2003; 2003WO-US024931.
XX
XX 07-AUG-2002; 2002US-0401597P.
XX 09-AUG-2002; 2002US-0402205P.
XX 09-AUG-2002; 2002US-0402209P.
XX 13-AUG-2002; 2002US-0403517P.
XX 13-AUG-2002; 2002US-0403518P.
XX 15-AUG-2002; 2002US-0403696P.
XX 26-AUG-2002; 2002US-0406318P.
XX 27-AUG-2002; 2002US-0406202P.
XX 06-SEP-2002; 2002US-00236392.
XX 13-SEP-2002; 2002US-00242943.
XX 01-NOV-2002; 2002US-0423138P.
XX 06-AUG-2003; 2003US-00635149.
XX (CURA-) CURAGEN CORP.
XX
XX Zhong M, Ji W, Guo X, Rieger DK, Padigaru M, Malcolm R;
PI Spytek KA, Anderson DW, Gorman L, Catterton E, Macdougall JR;
PI Stone DJ, Edinger SR;
XX
XX WPI; 2004-180660/17.
XX
XX Novel polypeptides (NOVX) and nucleic acid molecules, useful for
XX diagnosing, preventing or treating NOVX-associated disorders, e.g.
XX atherosclerosis, cancer, diabetes, Alzheimer's disease, Parkinson's
XX disease, asthma or allergies.
XX
XX Example C; SEQ ID NO 133; 233pp; English.
XX
XX This invention relates to novel human NOVX proteins and the DNA sequences
XX which encode them. The invention may be useful for the development of
XX compounds with an antiarteriosclerotic, cytostatic, antidiabetic,
XX antiparkinsonian, neuroprotective, nootropic, antiasthmatic,
XX anti-allergic, immunosuppressive, antiarthritic, antirheumatic,
XX osteopathic, dermatological, anti-inflammatory, anti-HIV, hypotensive,
XX haemostatic, anorectic, gastrointestinal-Gen, antitumor, antimicrobial,
XX antipsoriatic, neuroleptic, antidepressant, anabolic, eating disorders-
XX Gen, antifertility or nephrotropic activity. In addition, the sequences
XX disclosed may be useful for gene therapy or antisense gene therapy. The
XX NOVX polypeptides, nucleic acid and antibody are useful for manufacturing
XX a medicament for treating a syndrome associated with a human disease. The
XX NOVX polypeptides and polynucleotides are also useful for diagnosing,
XX treating and preventing disorders associated with aberrant expression or
XX aberrant physiological interactions of the polypeptide, for example
XX atherosclerosis, cancer, diabetes, Alzheimer's disease, Parkinson's
XX disease, asthma, allergies, immune disease, graft-versus-host disease,
XX osteoarthritis, rheumatoid arthritis, scleroderma, systemic lupus
XX erythematosus, AIDS, hypertension, haemophilia, idiopathic
XX thrombocytopenic purpura, obesity, inflammatory bowel disease, Crohn's
XX disease, ulcerative colitis, infectious disease, psoriasis, multiple
XX sclerosis, schizophrenia, depression, anorexia, infertility,
XX glomerulonephritis. The NOVX polypeptides and nucleic acid molecules can
XX be used for determining the presence of or predisposition to a disease
XX associated with altered levels of the NOVX polypeptide or the nucleic
XX acid molecule, or for screening for molecules that inhibit or enhance
XX NOVX activity or function. The polynucleotides may be used as
XX hybridisation probes, in chromosome mapping, tissue typing, preventive
XX medicine, or pharmacogenomics. The present sequence is that of a PCR
XX primer which was used in the exemplification of the invention.
XX
XX Sequence 20 BP; 1 A; 6 C; 5 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1495 GGCTGGAGTACCTTCCTTC 1512
DB 3 GGCTGGAGTACCTTCCTTC 20

RESULT 1701
ADN48320/C
ID ADN48320 standard; DNA; 20 BP.
XX
XX AC ADN48320;
XX
XX DT 01-JUL-2004 (first entry)
XX
XX DE Human Jun N-terminal kinase 2 (JNK2) oligonucleotide #3.
XX
XX KW Human; Jun N-terminal kinase; JNK; Jun N-terminal kinase 2; JNK2;
KW hyperproliferative disease; cell cycle progression;
KW protein phosphorylation; tumour growth; cancer; apoptosis;
KW prostate cancer; inflammation; fibrosis; fibrotic disease; scarring;
KW peritoneal adhesion; lung fibrosis; conjunctival scarring; cytostatic;
KW antiinflammatory; vulvectomy; ss.
XX
XX OS Homo sapiens.
XX
XX PN US2004029823-A1.
XX
XX PD 12-FEB-2004.
XX
XX PF 15-JAN-2003; 2003US-00345444.
XX
XX PR 13-AUG-1997; 97US-00910629.
XX PR 07-AUG-1998; 98US-00130616.
XX PR 07-APR-1999; 99US-00287796.
XX PR 15-SEP-1999; 99US-00396902.
XX PR 31-JAN-2001; 2001US-00774809.
XX
XX (MCKA/) MCKAY R.
XX (DEAN/) DEAN N M.
XX (MONI/) MONIA B P.
XX (NERO/) NERO P S.
XX (GAAR/) GAARDE W A.
XX
XX Mckay R, Dean NM, Monia BP, Nero PS, Gaarde WA;
XX WPI; 2004-168941/16.
XX
XX New oligonucleotides, which specifically hybridizes with Jun N-terminal
XX kinase protein, useful in diagnosing or treating inflammation, fibrosis
XX or a fibrotic or hyperproliferative disease or condition.
XX
XX Claim 25; SEQ ID NO 31; 71pp; English.
XX
XX The invention relates to an oligonucleotide comprising 8-30 nucleotides
XX connected by covalent linkages, where the oligonucleotide has a sequence
XX specifically hybridisable with a nucleic acid encoding a Jun N-terminal
XX kinase (JNK) protein and modulates the expression of the JNK protein. The
XX invention also relates to a pharmaceutical composition comprising the
XX oligonucleotide(s) or its bioequivalent and a pharmaceutical carrier, a
XX method of treating an animal having, suspected of having or prone to
XX having a hyperproliferative disease, a method of modulating the
XX expression of a JNK protein in cells or tissues, a method of modulating
XX cell cycle progression, phosphorylation of a protein phosphorylated by a
XX JNK protein and expression of a cellular protein that promotes one or
XX more metastatic events in cultured cells or the cells of an animal, a
XX method of inhibiting the growth of a tumour in an animal, a method of
XX inducing apoptosis in a cell, a method of treating a human having a
XX disease or condition characterised by a reduction in apoptosis and a
XX method of treating an animal having a disease or condition associated
XX with a JNK protein. The oligonucleotide and composition are useful in
XX diagnosing or treating a disease or condition characterised by a
XX reduction in apoptosis (e.g. prostate cancer), a disease or condition
XX associated with a JNK protein (e.g. inflammation, fibrosis), a fibrotic
XX disease or condition (e.g. scarring, peritoneal adhesions, lung fibrosis,
XX conjunctival scarring) or a hyperproliferative disease or condition (e.g.
XX cancer), or in inhibiting the growth of a tumour. This sequence
XX represents a human JNK2 oligonucleotide of the invention.
XX
XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
SQ

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2695 CCACTTCCACCTGCCC 2712

Db 19 CCACTTCCACCTGACC 2

RESULT 1704

ADN96339

ID ADN96339 standard; DNA; 20 BP.

XX AC ADN96339;

DT 01-JUL-2004 (first entry)

XX Human NOVX PCR primer #99.

XX Human; NOVX; PCR; ss; metabolic disorder; diabetes; obesity;
 KW infectious disease; anorexia; cancer; neurodegenerative disorder;
 KW Alzheimer's disease; Parkinson's disease; immune disorder;
 KW haematopoietic disorder; antidiabetic; anorectic; antimicrobial;
 KW anabolic; eating disorder; cytostatic; neuroprotective; nootropic;
 KW antiparkinsonian; antianaemic; primer.

XX OS Homo sapiens.

XX US2004067490-A1.

XX 08-APR-2004.

XX 06-SEP-2002; 2002US-00236392.

XX 07-SEP-2001; 2001US-0318120P.

XX 07-SEP-2001; 2001US-0318130P.

XX 07-SEP-2001; 2001US-031819P.

XX 10-SEP-2001; 2001US-0318430P.

XX 12-SEP-2001; 2001US-0318765P.

XX 17-SEP-2001; 2001US-0322781P.

XX 17-SEP-2001; 2001US-0322816P.

XX 19-SEP-2001; 2001US-0323519P.

XX 20-SEP-2001; 2001US-0323631P.

XX 20-SEP-2001; 2001US-0323636P.

XX 25-SEP-2001; 2001US-0324969P.

XX 25-SEP-2001; 2001US-0325091P.

XX 26-SEP-2001; 2001US-0324990P.

XX 15-FEB-2002; 2002US-0357303P.

XX 28-FEB-2002; 2002US-0360973P.

XX 20-MAR-2002; 2002US-0366131P.

XX 25-MAR-2002; 2002US-0367753P.

XX 02-APR-2002; 2002US-0369479P.

XX 10-MAY-2002; 2002US-0379532P.

XX 17-MAY-2002; 2002US-0381664P.

XX 17-MAY-2002; 2002US-0381872P.

XX 28-MAY-2002; 2002US-0383651P.

XX 29-MAY-2002; 2002US-0384012P.

XX 19-JUN-2002; 2002US-0390155P.

XX (ZHON/) ZHONG M.

XX (LILL/) LI L.

XX (GORM/) GORMAN L.

XX (SPYT/) SPYTEK K A.

XX (KEKU/) KEKUDA R.

XX (TAUP/) TAUPIER R J.

XX (ANDE/) ANDERSON D W.

XX (VERN/) VERNET C A M.

XX (CATI/) CATTERTON E.

XX (MILL/) MILLER C E.

XX (SHEN/) SHENOY S G.

XX (PATT/) PATTURAJAN M.

XX (PENA/) PENA C E A.

XX (TCHE/) TCHERNEV V T.

XX (PADL/) PADIGARU M.

XX (GUSE/) GUSEV V Y.

PA (MAL/) MALYANKAR U M.

PA (BURG/) BURGESS C E.

PA (GERL/) GERLACH V.

PA (CASM/) CASMAN S J.

PA (RIEG/) RIEGER D K.

PA (GROS/) GROSSE W M.

PA (SMIT/) SMITHSON G.

PA (PEYM/) PEYMAN J A.

PA (STAR/) STARLING G.

PA (ROTH/) ROTHENBERG M B.

PA (LARO/) LAROCHELLE W J.

PA (SHIM/) SHIMKETS R A.

PA (CRAB/) CRABTREE J.

PA (RAST/) RASTELLI L.

PA (VOSS/) VOSS E Z.

PA (BOLD/) BOLDOG F L.

PA (EDIN/) EDINGER S R.

PA (MILL/) MILLET I.

PA (MACD/) MACDOUGALL J R.

PA (ELLE/) ELLERMAN K.

PA (CHAP/) CHAPOVAL A.

XX Zhong M, Li L, Gorman L, Spytek KA, Kekuda R, Taupier RJ;

PI Anderson DW, Vernet CAM, Catterton E, Miller CE, Shenoy SG;

PI Patturajan M, Pena CEA, Tchernev VT, Padigar M, Gusev VY;

PI Malyankar UM, Burgess CB, Gerlach V, Casman SJ, Rieger DK;

PI Grosse WM, Smithson G, Peyman JA, Starling G, Rothenberg ME;

PI Larochelle WJ, Shimkets RA, Crabtree J, Rastelli L, Voss EZ;

PI Boldog FL, Edinger SR, Millet I, Macdougall JR, Ellerman K;

PI Chapoval A;

XX WPI; 2004-355290/33.

XX New isolated polypeptide, useful for treating or preventing a pathology

PT associated with the polypeptide, e.g. diabetes, infectious disease,

PT cancer, neurodegenerative disorders or Alzheimer's disease.

XX Example C; SEQ ID NO 402; 552pp; English.

XX The invention relates to human NOVX polypeptides and polynucleotides. The
 CC isolated nucleic acids can be used to express the novel proteins, to
 CC detect novel mRNA or a genetic lesion in a novel gene and to modulate its
 CC activity. It can also be used in gene therapy for treating or preventing
 CC a pathology associated with the protein or nucleic acid. The disorders
 CC include metabolic disorders, diabetes, obesity, infectious diseases,
 CC anorexia, cancer, neurodegenerative disorders, Alzheimer's disease,
 CC Parkinson's disease, immune disorders and haematopoietic disorders. This
 CC sequence represents a PCR primer used in analysis of expression of a
 CC human NOVX polynucleotide of the invention.

XX Sequence 20 BP; 1 A; 6 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 1.7e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1495 GGCTGGACTACTCTTC 1512

Db 3 GGCTGGACTGCTTTC 20

RESULT 1705

ADM15156/c

ID ADM15156 standard; DNA; 20 BP.

XX AC ADM15156;

XX 01-JUL-2004 (first entry)

DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1343.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;

KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT
FT
PN WO2004028458-A2.
XX
PD 08-APR-2004.
XX
XX
PD 25-SEP-2003; 2003WO-US030374.
XX
PD 25-SEP-2002; 2002US-0413549P.
XX
PA (PHAA) PHARMACIA CORP.
XX
XX Gierse JK;
PI
DR WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGEs-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischaemia.
XX
XX Claim 4; SEQ ID NO 1343; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGEs-1). The
CC human mPGEs-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGEs-1, which specifically hybridise with the nucleic acid mPGEs-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGEs-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGEs-1. mPGEs-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGEs-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGEs-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 11 A; 7 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 0.48; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.98; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2315 GTCTGTGTGTGTGTGT 2332

Db 19 GTATGTGTGTGTGTGT 2
RESULT 1706
ADM15179/c
ID ADM15179 standard; DNA; 20 BP.
XX
XX ADM15179;
AC
DT 01-JUL-2004 (first entry)
XX
XX Human mPGEs-1 chimeric antisense oligonucleotide SEQ ID NO:1366.
DE
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGEs-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
OS
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT
FT
PN WO2004028458-A2.
XX
PD 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
PA (PHAA) PHARMACIA CORP.
XX
XX Gierse JK;
PI
DR WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGEs-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischaemia.
XX
XX Claim 4; SEQ ID NO 1366; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGEs-1). The
CC human mPGEs-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGEs-1, which specifically hybridise with the nucleic acid mPGEs-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGEs-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGEs-1. mPGEs-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGEs-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGEs-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 11 A; 7 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 0.48; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.98; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2315 GTCTGTGTGTGTGTGT 2332

CC anti-diabetic, immunomodulator, cardiant, neuroprotective,
 CC anti-inflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 11 A; 7 C; 0 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2315 GTCTGTGTGTGTGTGT 2332
 Db 20 GTATGTGTGTGTGTGT 3
 RESULT 1707
 ADM15541/c
 ID ADM15541 standard; DNA; 20 BP.
 XX AC ADM15541;
 XX
 DT 01-JUL-2004 (first entry)
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1728.
 XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; anti-diabetic;
 KW immunomodulator; cardiant; neuroprotective; anti-inflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"
 modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX
 PN WO2004028458-A2.
 XX
 PD 08-APR-2004.
 XX
 PF 25-SEP-2003; 2003WO-US030374.
 XX
 PR 25-SEP-2002; 2002US-0413549P.
 XX
 PA (PHAA) PHARMACIA CORP.
 XX
 XX Gierse JK;
 PI WPI; 2004-305094/28.
 XX
 DR New antisense compound, having a sequence targeted to a nucleic acid
 PT

PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischaemia.
 XX
 XX Claim 4; SEQ ID NO 1728; 132pp; English.
 XX
 CC The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC anti-diabetic, immunomodulator, cardiant, neuroprotective,
 CC anti-inflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 10 A; 7 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2316 TCTGTGTGTGTGTGTGT 2333
 Db 20 TATGTGTGTGTGTGTGT 3
 RESULT 1708
 ADM14919/c
 ID ADM14919 standard; DNA; 20 BP.
 XX AC ADM14919;
 XX
 DT 01-JUL-2004 (first entry)
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1106.
 XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; anti-diabetic;
 KW immunomodulator; cardiant; neuroprotective; anti-inflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"
 modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX

XX WO2004028458-A2.
PN 08-APR-2004.
XX 25-SEP-2003; 2003WO-US030374.
XX 25-SEP-2002; 2002US-0413549P.
PR (PHAA) PHARMACIA CORP.
XX Gierse JK;
XX WPI; 2004-305094/28.
DR New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX Claim 4; SEQ ID NO 1106; 132pp; English.
PS The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC anti-diabetic, immunomodulatory, cardiant, neuroprotective,
CC anti-inflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX Sequence 20 BP; 6 A; 9 C; 4 G; 1 T; 0 U; 0 Other;
SQ

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2361 GTGTGCTGTGTGCTGTC 2378
DB 18 GTGGGCTGTGTGTGTC 1

RESULT 1709
ADM14852/C
ID ADM14852 standard; DNA; 20 BP.
XX ADM14852;
XX 01-JUL-2004 (first entry)
DT Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1039.
DE chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW immunomodulatory; cardiant; neuroprotective; anti-inflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX Homo sapiens.
OS

OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /notes= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /notes= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /notes= "2'-O-methoxyethyls"
XX WO2004028458-A2.
PN 08-APR-2004.
XX 25-SEP-2003; 2003WO-US030374.
XX 25-SEP-2002; 2002US-0413549P.
PR (PHAA) PHARMACIA CORP.
XX Gierse JK;
XX WPI; 2004-305094/28.
DR New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX Claim 4; SEQ ID NO 1039; 132pp; English.
PS The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC anti-diabetic, immunomodulatory, cardiant, neuroprotective,
CC anti-inflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX Sequence 20 BP; 6 A; 9 C; 4 G; 1 T; 0 U; 0 Other;
SQ

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2361 GTGTGCTGTGTGCTGTC 2378
DB 19 GTGGGCTGTGTGTGTC 2

RESULT 1710
ADM15032/C
ID ADM15032 standard; DNA; 20 BP.
XX ADM15032;
AC

XX DT 01-JUL-2004 (first entry)

XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1219.

XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;

XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

XX KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;

XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;

XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;

XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;

XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;

XX KW reperfusion injury; ophthalmic disorder; immunological disorder;

XX KW cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1. .20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine

FT residues are 5-methylcytidines"

FT modified_base 1. .5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16. .20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid

XX encoding mPGES-1, useful for preparing a composition for treating e.g.,

XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or

XX ischaemia.

XX Claim 4; SEQ ID NO 1219; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide

XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The

XX human mPGES-1 gene is located on chromosome 9, more specifically to

XX 9q34.3. The present invention also describes: (1) antisense compounds,

XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding

XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and

XX inhibits its expression; (2) a method of inhibiting the expression of

XX mPGES-1 in cells or tissues; and (3) a method of treating an animal

XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric

XX antisense oligonucleotides and antisense compounds have cytostatic,

XX antidiabetic, immunomodulatory, cardiant, neuroprotective,

XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,

XX ophthalmological, immunomodulatory and cardiovascular activities, and can

XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound

XX can be used for preparing a composition for treating a disease or

XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's

XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or

XX ophthalmic, immunological, cardiovascular or neurological disorder.

XX

SQ Sequence 20 BP; 7 A; 8 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 1.7e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2322 TGTGTGTGTGTGTGTGTG 2339

Db 18 TGTGTGTGTGTGTGTGTG 1

RESULT 1711

ADM15410/C

ID ADM15410 standard; DNA; 20 BP.

XX AC ADM15410;

XX DT 01-JUL-2004 (first entry)

XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1597.

XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;

XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

XX KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;

XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;

XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;

XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;

XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;

XX KW reperfusion injury; ophthalmic disorder; immunological disorder;

XX KW cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1. .20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine

FT residues are 5-methylcytidines"

FT modified_base 1. .5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16. .20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid

XX encoding mPGES-1, useful for preparing a composition for treating e.g.,

XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or

XX ischaemia.

XX Claim 4; SEQ ID NO 1597; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide

XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The

XX human mPGES-1 gene is located on chromosome 9, more specifically to

XX

CC 9q34.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGEs-1, which specifically hybridize with the nucleic acid mPGEs-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGEs-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGEs-1. mPGEs-1 chimeric antisense oligonucleotides and antisense compounds have cytostatic, antidiabetic, immunomodulatory, cardiant, neuroprotective, antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic, ophthalmological, immunomodulatory and cardiovascular activities, and can be used as mPGEs-1 inhibitors and in gene therapy. The antisense compound can be used for preparing a composition for treating a disease or condition associated with mPGEs-1 e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.

SQ Sequence 20 BP; 10 A; 7 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2336 TGTGTGTGTGTGTGCA 2353

DB 19 TGTGTATGTGTGTGTA 2

RESULT 1712

AD046030/C
ID ADO46030 standard; DNA; 20 BP.

XX AC ADO46030;

DT 15-JUL-2004 (first entry)

DE Human oligonucleotide #1396.

XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5; CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a; tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease; lung disease; hyper-responsiveness; adenosine; adenosine A receptor; asthma; lung allergy; inflammation; inflammatory disease; airway inflammation; allergy; impeded respiration; cystic fibrosis; CF; chronic obstructive pulmonary disease; COPD; allergic rhinitis; acute respiratory distress syndrome; pulmonary hypertension; lung inflammation; bronchitis; airway obstruction; bronchoconstriction.

XX Homo sapiens.

XX US2004049022-A1.

XX 11-MAR-2004.

XX 25-JUL-2003; 2003US-00627930.

XX 23-APR-2002; 2002WO-US013135.

XX 23-APR-2002; 2002WO-US013143.

XX (NYCE/) NYCE J. W.

XX (SAND/) SANDRASAGRA A.

XX (TANG/) TANG L.

XX (AGUI/) AGUILAR D.

XX (MILL/) MILLER S.

XX (SHAH/) SHAHABUDDIN S.

XX (LUHH/) LU H.

XX (CONG/) CONG H.

XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;

PI Shahabuddin S, Lu H, Cong H;

XX WPI; 2004-293804/27.

PT Novel single or multiple target oligonucleotide anti-sense to e.g.

PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g. asthma.

PS Claim 2; SEQ ID NO 1397; 174pp; English.

XX The invention relates to oligonucleotides anti-sense to an initiation codon, coding region, 5' or 3' intron-exon junction, intron or region with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)-5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention also relates to a method of screening a candidate compound that binds to one or more nucleic acid target(s) or expressed product(s), for the prevention and/or treatment of a respiratory or lung disease. The oligonucleotides are useful for reducing or inhibiting expression of a gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are useful for preventing or treating a respiratory or lung disease. The respiratory or lung disease is associated with hyper-responsiveness to and/or increased levels of, adenosine and/or levels of adenosine A receptor(s), and/or asthma and/or lung allergies associated with inflammation or an inflammatory disease. The respiratory or lung disease is chosen from airway inflammation, allergy, asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD), allergic rhinitis, acute respiratory distress syndrome, pulmonary hypertension, lung inflammation, bronchitis, airway obstruction or bronchoconstriction. This sequence represents an oligonucleotide of the invention.

SQ Sequence 20 BP; 2 A; 10 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3196 CCGGAGCTGGAGGATCCC 3213

DB 19 CTGGAGCTGGAGGAGCCC 2

RESULT 1713

AD046222

ID ADO46222 standard; DNA; 20 BP.

XX AC ADO46222;

XX 15-JUL-2004 (first entry)

XX Human oligonucleotide #1588.

XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5; CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a; tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease; lung disease; hyper-responsiveness; adenosine; adenosine A receptor; asthma; lung allergy; inflammation; inflammatory disease; airway inflammation; allergy; impeded respiration; cystic fibrosis; CF; chronic obstructive pulmonary disease; COPD; allergic rhinitis; acute respiratory distress syndrome; pulmonary hypertension; lung inflammation; bronchitis; airway obstruction; bronchoconstriction.

XX Homo sapiens.

XX US2004049022-A1.

XX 11-MAR-2004.

XX 25-JUL-2003; 2003US-00627930.

XX 23-APR-2002; 2002WO-US013135.

XX 23-APR-2002; 2002WO-US013143.

PA (NYCE/) NYCE J W.
 PA (SAND/) SANDRASAGRA A.
 PA (TANG/) TANG L.
 PA (AGUI/) AGUILAR D.
 PA (MILL/) MILLER S.
 PA (SHAH/) SHAHABUDDIN S.
 PA (LUHH/) LU H.
 PA (CONG/) CONG H.
 XX
 PI Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 DR WPI; 2004-293804/27.
 XX
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.
 PT initiation codon, intron of respiratory disease-relevant gene e.g. CCRI,
 PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
 PT asthma.
 XX
 XX Claim 2; SEQ ID NO 1589; 174pp; English.
 XX
 CC The invention relates to oligonucleotides anti-sense to an initiation
 CC codon, coding region, 5' or 3' intron-exon junction, intron or region
 CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
 CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)-
 CC -5 receptor, CCRI, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
 CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
 CC also relates to a method of screening a candidate compound that binds to
 CC one or more nucleic acid target(s) or expressed product(s), for the
 CC prevention and/or treatment of a respiratory or lung disease. The
 CC oligonucleotides are useful for reducing or inhibiting expression of a
 CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
 CC CCRI, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
 CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
 CC useful for preventing or treating a respiratory or lung disease. The
 CC respiratory or lung disease is associated with hyper-responsiveness to
 CC and/or increased levels of, adenosine and/or levels of adenosine A
 CC receptor(s), and/or asthma and/or lung allergies associated with
 CC inflammation or an inflammatory disease. The respiratory or lung disease
 CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
 CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
 CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
 CC hypertension, lung inflammation, bronchitis, airway obstruction or
 CC bronchoconstriction. This sequence represents an oligonucleotide of the
 CC invention.
 XX
 SQ Sequence 20 BP; 2 A; 6 C; 10 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1573 CAGTGGCCCGGGCATG 1590
 Db 1 CGGAGGCCCGGGCATG 18
 RESULT 1714
 ADO21297
 ID ADO21297 standard; DNA; 20 BP.
 XX
 AC ADO21297;
 XX
 DT 15-JUL-2004 (first entry)
 XX
 DE Human fatty acid synthase, antisense oligonucleotide #2.
 XX
 KW ss; fatty acid synthase; antisense therapy; metabolic rate; adiposity;
 KW serum leptin; serum cholesterol; blood glucose; serum insulin;
 KW serum lipid; breast cancer; prostate cancer; colon cancer;
 KW endometrium cancer; ovary cancer; thyroid cancer; infection;
 KW inflammation; tumour; probe; human.
 XX

OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= b
 FT /mod_base= Other
 FT /note= "Phosphorothioate backbone. All cytidines are 5-
 FT methylcytidines"
 FT modified_base 1..5
 FT /tag= a
 FT /mod_base= Other
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= Other
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 XX US2004077570-A1.
 PN
 XX 22-APR-2004.
 PD
 XX 17-OCT-2002; 2002US-00274085.
 PF
 XX 17-OCT-2002; 2002US-00274085.
 PR
 XX (FREI/) FREIER S M.
 PA (DOB/) DOBIE K W.
 PA (BHAN/) BHANOT S.
 PA
 XX Freier SM, Dobie KW, Bhanot S;
 PI WPI; 2004-340035/31.
 DR
 XX New compound of 8-80 nucleobases in length which inhibits the expression
 PT of fatty acid synthase, useful for treating disease or condition
 PT associated with fatty acid synthase such as breast and colon cancers.
 XX
 XX Example 15; SEQ ID NO 21; 87pp; English.
 PS
 XX The invention relates to antisense oligonucleotides targeted to a nucleic
 CC acid molecule encoding fatty acid synthase, which inhibit the expression
 CC of fatty acid synthase. The antisense oligonucleotides are useful for
 CC increasing the metabolic rate, decreasing adiposity, decreasing serum
 CC leptin, decreasing serum cholesterol, decreasing blood glucose,
 CC decreasing serum insulin, decreasing serum lipids and treating an animal
 CC having a disease or condition associated with fatty acid synthase, such
 CC as breast, prostate, colon, endometrium, ovary and thyroid cancers. It
 CC may also be useful prophylactically, e.g., to prevent or delay infection,
 CC inflammation or tumour formation. The present sequence represents a human
 CC fatty acid synthase antisense oligonucleotide.
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2231 TAGCAGCCGCCCTGCTG 2248
 Db 1 TGGCAGCCGCCCATGCTG 18
 RESULT 1715
 ADO21409/c
 ID ADO21409 standard; DNA; 20 BP.
 XX
 AC ADO21409;
 XX
 DT 15-JUL-2004 (first entry)
 XX
 DE Human fatty acid synthase, antisense oligonucleotide #14.
 XX
 KW ss; fatty acid synthase; antisense therapy; metabolic rate; adiposity;
 XX

KW serum leptin; serum cholesterol; blood glucose; serum insulin;
 KW serum lipid; breast cancer; prostate cancer; colon cancer;
 KW endometrium cancer; ovary cancer; thyroid cancer; infection;
 KW inflammation; tumour; probe; human.

OS Homo sapiens.

XX US2004077570-A1.

XX 22-APR-2004.

XX 17-OCT-2002; 2002US-00274085.

XX 17-OCT-2002; 2002US-00274085.

XX (PREI/) FREIER S M.

PA (DOBI/) DOBIE K W.

PA (BHANI/) BHANOT S.

XX PI Freier SM, Dobie KW, Bhanot S;

XX WPI; 2004-340035/31.

XX New compound of 8-80 nucleobases in length which inhibits the expression

PT of fatty acid synthase, useful for treating disease or condition

PT associated with fatty acid synthase such as breast and colon cancers.

XX Example 16; SEQ ID NO 133; 87pp; English.

XX The invention relates to antisense oligonucleotides targeted to a nucleic
 CC acid molecule encoding fatty acid synthase, which inhibit the expression
 CC of fatty acid synthase. The antisense oligonucleotides are useful for
 CC increasing the metabolic rate, decreasing adiposity, decreasing serum
 CC leptin, decreasing serum cholesterol, decreasing blood glucose,
 CC decreasing serum insulin, decreasing serum lipids and treating an animal
 CC having a disease or condition associated with fatty acid synthase, such
 CC as breast, prostate, colon, endometrium, ovary and thyroid cancers. It
 CC may also be useful prophylactically, e.g., to prevent or delay infection,
 CC inflammation or tumour formation. The present sequence represents a human
 CC fatty acid synthase antisense oligonucleotide.

XX Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 1.7e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2231 TAGCAGCCACCTGCTG 2248

DB 20 TGGCAGCCACCATGCTG 3

RESULT 1716

ADO44492/c

ID ADO44492 standard; cDNA; 20 BP.

XX ADO44492;

XX 29-JUL-2004 (first entry)

DE Human GPR6 receptor cDNA detecting probe 1.

KW GPR6; GPCR; G-protein coupled receptor 6; antianemic; haemostatic;
 KW cytosolic; cardiovascular; cardiac; vasotropic; antiarrhythmic;
 KW antihypertensive; hypotensive; CNS; antiparkinsonian; nootropic;
 KW neuroprotective; cerebroprotective; neuroleptic; anticonvulsant;
 KW nephrotropic; gastrointestinal; anti-inflammatory; antitumor; anti-HIV;
 KW antiasthmatic; antiallergic; immunosuppressive; thyromimetic;
 KW dermatological; gene therapy; protein therapy; probe; ss.

XX Homo sapiens.

OS Synthetic.

XX

PN WO2004038416-A1.

XX 06-MAY-2004.

XX 15-OCT-2003; 2003WO-EP011394.

XX 24-OCT-2002; 2002EP-00023769.

XX (FARB) BAYER HEALTHCARE AG.

XX Golz S, Brueggemeier U, Summer H;

XX WPI; 2004-365568/34.

XX Screening for therapeutic agents, useful for treating e.g. hematological
 PT diseases, comprises contacting a test compound with a G-protein coupled
 PT receptor 6 polypeptide and detecting binding of the test compound to the
 PT polypeptide.

XX Example 2; SEQ ID NO 4; 128pp; English.

XX The invention relates to screening for therapeutic agents and involves
 CC contacting a test compound with a G-protein coupled receptor 6 (GPR6)
 CC polypeptide and detecting binding of the test compound to GPR6
 CC polypeptide, or determining GPR6 polypeptide activity at a certain test
 CC compound concentration (or in the absence of the test compound) and at a
 CC different concentration of the test compound or at the presence of a
 CC compound known to be a GPR6 polypeptide regulator. The therapeutic agents
 CC are useful in treating disease such as hematological disease.
 CC cardiovascular disease, disorders of the peripheral and central nervous
 CC system, neurological disorders, gastroenterological disorders, inflammation
 CC and cancer in a mammal. The regulators of a GPR6 are useful for preparing
 CC a pharmaceutical composition for treating disease such as hematological
 CC disease (e.g., anaemia, myeloproliferative disorders, hemorrhagic
 CC disorders, leukopenia, leukaemia, and lymphomas), cardiovascular disease
 CC (e.g., heart failure, myocardial infarction, ischaemia, arrhythmias,
 CC atherosclerosis, and hypertensive vascular diseases), disorders of the
 CC peripheral and central nervous system (e.g., Parkinson's disease,
 CC dementia, multiple sclerosis, stroke, Alzheimer's disease, Pick's
 CC disease, schizophrenia, and epilepsy), urological disorders (e.g., renal
 CC transplant rejection, lupus nephritis, glomerulopathies, nephritis,
 CC neurogenic bladder syndrome, and erectile dysfunction),
 CC gastroenterological disorders (e.g., dysphagia, Barrett's metaplasia,
 CC stress gastritis, atrophy of gastric glands, gastric ulcers, chronic
 CC pancreatitis, islet cell tumours, VIPoma syndrome, Crohn's disease, and
 CC Kaposi's sarcoma), inflammation (e.g., asthma, atopic diseases, allergic
 CC rhinitis or conjunctivitis, hereditary angioedema, Hashimoto's
 CC thyroiditis, systemic lupus erythematosus and scleroderma), and cancer in
 CC a mammal. They are also useful for the regulation of GPR6 activity in a
 CC mammal having the disease. The GPR6 are useful for immunizing a mammal to
 CC produce polyclonal antibodies and for diagnostic purposes. The present
 CC sequence represents a probe hybridising to the human GPR6 receptor cDNA.

XX Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 20;

Best Local Similarity 88.9%; Pred. No. 1.7e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2015 ACCTGACCGTGTCTTA 2032

DB 19 ACTTGACCGTGTCTTA 2

RESULT 1717

ADN37165/c

ID ADN37165 standard; DNA; 20 BP.

XX ADN37165;

XX 12-AUG-2004 (first entry)

DE Human Gankyrin DNA, antisense oligonucleotide #32.

XX Antisense therapy; human; Gankyrin; hyperproliferative disorder; cancer;
KW cytosstatic; phosphorothioate; ss.
XX Homo sapiens.
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX
XX
PN US2004102391-A1.
XX
XX 27-MAY-2004.
XX
XX 21-NOV-2002; 2002US-00302027.
XX
XX 21-NOV-2002; 2002US-00302027.
XX
XX 21-NOV-2002; 2002US-00302027.
XX (ISIS-) ISIS PHARM INC.
XX Dean NM., Dobie KW;
XX WPI; 2004-399721/37.
XX
XX New compound targeted to a nucleic acid molecule encoding Gankyrin and
PT inhibits the expression of Gankyrin, useful for modulating the expression
PT of Gankyrin or for diagnosing or treating, e.g. hyperproliferative
PT disorder.
XX
XX Example 15; SEQ ID NO 45; 52pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding human Gankyrin. The antisense compound comprises an
XX antisense oligonucleotide that specifically hybridises with the nucleic
XX acid and inhibits the expression of Gankyrin. The antisense
XX oligonucleotide is a chimeric oligonucleotide. The antisense
XX oligonucleotide comprises at least one modified internucleoside linkage,
XX preferably a phosphorothioate linkage. It also comprises at least one
XX modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar
XX moiety. The antisense oligonucleotide further comprises at least one
XX modified nucleobase, preferably a 5-methylcytosine. The antisense
XX oligonucleotides are useful for the treatment of diseases such as
XX hyperproliferative disorders, e.g. cancer. The present sequence
XX represents an antisense oligonucleotide used in the examples of the
XX present invention.
XX
XX Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1447 GCGGCCAAGGGTAACCTG 1464
DB 20 GCAGCCAAGGGTAACCTG 3
RESULT 1718
ADN37225
ID ADN37225 standard; DNA; 20 BP.
XX
XX ADN37225;
AC ADN37225;
XX
XX 12-AUG-2004 (first entry)
DT
XX Human Gankyrin DNA target sequence #18.
DE
XX Antisense therapy; human; Gankyrin; hyperproliferative disorder; cancer;

KW cytosstatic; ds.
XX
XX Homo sapiens.
OS
PN US2004102391-A1.
XX
XX 27-MAY-2004.
XX
XX 21-NOV-2002; 2002US-00302027.
XX
XX 21-NOV-2002; 2002US-00302027.
XX (ISIS-) ISIS PHARM INC.
XX Dean NM, Dobie KW;
XX WPI; 2004-399721/37.
XX
XX New compound targeted to a nucleic acid molecule encoding Gankyrin and
PT inhibits the expression of Gankyrin, useful for modulating the expression
PT of Gankyrin or for diagnosing or treating, e.g. hyperproliferative
PT disorder.
XX
XX Example 15; SEQ ID NO 105; 52pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding human Gankyrin. The antisense compound comprises an
XX antisense oligonucleotide that specifically hybridises with the nucleic
XX acid and inhibits the expression of Gankyrin. The antisense
XX oligonucleotide is a chimeric oligonucleotide. The antisense
XX oligonucleotide comprises at least one modified internucleoside linkage,
XX preferably a phosphorothioate linkage. It also comprises at least one
XX modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar
XX moiety. The antisense oligonucleotide further comprises at least one
XX modified nucleobase, preferably a 5-methylcytosine. The antisense
XX oligonucleotides are useful for the treatment of diseases such as
XX hyperproliferative disorders, e.g. cancer. The present sequence
XX represents a human Gankyrin DNA target sequence for an antisense
XX oligonucleotide.
XX
XX Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1447 GCGGCCAAGGGTAACCTG 1464
DB 1 GCAGCCAAGGGTAACCTG 18
RESULT 1719
AD052173
ID AD052173 standard; DNA; 20 BP.
XX
XX AD052173;
AC AD052173;
XX
XX 12-AUG-2004 (first entry)
DT
XX Human inhibitor of apoptosis-like antisense oligonucleotide seqid 47.
DE
XX
XX cytosstatic; gene therapy; inhibitors of apoptosis-like; IAP-like;
KW IAP-like modulator; IAP-like associated disorder;
KW hyperproliferative disorder; human; antisense oligonucleotide;
XX antisense technology; ss.
XX
XX Homo sapiens.
OS
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines

```

FT modified_base are 5-methylcytidines"
FT 1. .5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT 15. .20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX US2004102395-A1.
XX 27-MAY-2004.
XX
XX 22-NOV-2002; 2002US-00303325.
XX
XX 22-NOV-2002; 2002US-00303325.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Dobie KW;
XX WPI; 2004-399725/37.
XX
XX New compound targeted to a nucleic acid molecule encoding inhibitors of
XX apoptosis (IAP)-like and inhibits expression of IAP-like, useful for
XX modulating the expression of IAP-like or for treating, e.g.
XX hyperproliferative disorder.
XX
XX Example 14; SEQ ID NO 47; 58pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted to
XX a nucleic acid molecule encoding inhibitors of apoptosis (IAP)-like,
XX where the compound specifically hybridizes with the nucleic acid molecule
XX encoding IAP-like comprising 16000 bp (SEQ ID NO. 4) and inhibits the
XX expression of IAP-like. Also described are: inhibiting the expression of
XX IAP-like in cells or tissues; screening for a modulator of IAP-like; a
XX diagnostic method for identifying a disease state comprising identifying
XX the presence of IAP-like in a sample using at least one of the primers
XX selected from 2 sequences comprising SEQ ID NO. 5 or 6, or the probe
XX comprising SEQ ID NO. 7; a kit or assay device comprising the compound;
XX and treating an animal having a disease or condition associated with IAP-
XX like. The compound is useful for modulating the expression of IAP-like.
XX It is also useful for diagnosing or treating diseases associated with
XX expression of IAP-like, e.g. a hyperproliferative disorder. This sequence
XX represents a human inhibitor of apoptosis (IAP)-like antisense
XX oligonucleotide.
XX
XX Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 1.7e+03;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 3198 GGAGCTGGAGGATCCCT 3215
XX |||||
XX Db 1 GGAGCTGGAGATCACCT 18
XX
XX RESULT 1720
XX ADP76708
XX ID ADP76708 standard; DNA; 20 BP.
XX
XX AC ADP76708;
XX
XX 12-AUG-2004 (first entry)
XX
XX Chimeric phosphorothioate oligonucleotide #507.
XX
XX GFAT; Antidiabetic; Cardiant;
XX Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX reperfusion; ss.
XX
XX
XX

```

```

OS Synthetic.
XX Key Location/Qualifiers
XX modified_base 1. .4
XX /*tag= a
XX /mod_base= other
XX /note= "2-methoxyethyl wing"
XX modified_base 17. .20
XX /*tag= b
XX /mod_base= other
XX /note= "2-methoxyethyl wing"
XX
XX WO2004035763-A2.
XX
XX 29-APR-2004.
XX
XX 02-OCT-2003; 2003WO-US033332.
XX
XX 17-OCT-2002; 2002US-0419268P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Broschat KO, Crosby SD;
XX
XX WPI; 2004-348453/32.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX ischemia/reperfusion injury.
XX
XX Claim 4; SEQ ID NO 507; 175pp; English.
XX
XX The present invention relates to a compound which specifically hybridizes
XX with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX modulating the expression of GFAT, and which comprise any of the 3063
XX sequences of 20 base pairs, given in the specification. The compound,
XX composition and methods are useful for treating a disease or condition,
XX associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX They are also useful in research and diagnostics for modulating the
XX expression of GFAT. The present sequence represents a chimeric
XX phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX oligonucleotides inhibit human GFAT expression.
XX
XX Sequence 20 BP; 0 A; 6 C; 11 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 1.7e+03;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1473 TCTGCGGCGCGCGGCC 1490
XX |||||
XX Db 1 TCTGCGGCTCGGGGCC 18
XX
XX RESULT 1721
XX ADP76354
XX ID ADP76354 standard; DNA; 20 BP.
XX
XX AC ADP76354;
XX
XX 12-AUG-2004 (first entry)
XX
XX Chimeric phosphorothioate oligonucleotide #153.
XX
XX GFAT; Antidiabetic; Cardiant;
XX Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX reperfusion; ss.
XX
XX Synthetic.
XX
XX

```

```

FH Key          Location/Qualifiers
FT modified_base 1. .4
FT FT          /*tag= a
FT FT          /mod_base= other
FT FT          /note= "2-methoxyethyl wing"
FT modified_base 17. .20
FT FT          /*tag= b
FT FT          /mod_base= other
FT FT          /note= "2-methoxyethyl wing"
XX PN
XX WO2004035763-A2.
XX PD
XX 29-APR-2004.
XX PF
XX 02-OCT-2003; 2003WO-US033332.
XX PR
XX 17-OCT-2002; 2002US-0419268P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI
XX Broschat KO, Crosby SD;
XX WIPI; 2004-348453/32.
XX DR
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX ischemia/reperfusion injury.
XX PS Claim 4; SEQ ID NO 153; 175pp; English.
XX CC The present invention relates to a compound which specifically hybridizes
XX with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX modulating the expression of GFAT, and which comprise any of the 3063
XX sequences of 20 base pairs, given in the specification. The compound,
XX composition and methods are useful for treating a disease or condition
XX associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX They are also useful in research and diagnostics for modulating the
XX expression of GFAT. The present sequence represents a chimeric
XX phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX oligonucleotides inhibit human GFAT expression.
XX SQ Sequence 20 BP; 4 A; 2 C; 6 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3237 TACTTGGAGTGATTCCTCA 3254
Db 2 TACTTGGTGATTCCTCA 19
RESULT 1722
ADP77029
ID ADP77029 standard; DNA; 20 BP.
XX AC
XX ADP77029;
XX DT
XX 12-AUG-2004 (first entry)
XX Chimeric phosphorothioate oligonucleotide #828.
XX GFAT; Antidiabetic; Cardiant;
XX Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX reperfusion; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1. .4

```

```

FT FT          /*tag= a
FT FT          /mod_base= other
FT modified_base 17. .20
FT FT          /*tag= b
FT FT          /mod_base= other
FT FT          /note= "2-methoxyethyl wing"
XX PN
XX WO2004035763-A2.
XX PD
XX 29-APR-2004.
XX PF
XX 02-OCT-2003; 2003WO-US033332.
XX PR
XX 17-OCT-2002; 2002US-0419268P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI
XX Broschat KO, Crosby SD;
XX WIPI; 2004-348453/32.
XX DR
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX ischemia/reperfusion injury.
XX PS Claim 4; SEQ ID NO 828; 175pp; English.
XX CC The present invention relates to a compound which specifically hybridizes
XX with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX modulating the expression of GFAT, and which comprise any of the 3063
XX sequences of 20 base pairs, given in the specification. The compound,
XX composition and methods are useful for treating a disease or condition
XX associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX They are also useful in research and diagnostics for modulating the
XX expression of GFAT. The present sequence represents a chimeric
XX phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
XX oligonucleotides inhibit human GFAT expression.
XX SQ Sequence 20 BP; 1 A; 6 C; 10 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1473 TCTGCGGCGCGCGCGGCC 1490
Db 2 TCTGCGGCGCTCGGGGCC 19
RESULT 1723
ADP76709
ID ADP76709 standard; DNA; 20 BP.
XX AC
XX ADP76709;
XX DT
XX 12-AUG-2004 (first entry)
XX Chimeric phosphorothioate oligonucleotide #508.
XX GFAT; Antidiabetic; Cardiant;
XX Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
XX reperfusion; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1. .4
FT FT          /*tag= a
FT FT          /mod_base= other

```

```
FT      modified_base      /note= "2-methoxyethyl wing"  
FT      17. .20  
FT      /*tag= b  
FT      /mod_base= other  
FT      /note= "2-methoxyethyl wing"  
XX  
XX      WO2004035763-A2.  
XX  
XX      29-APR-2004.  
XX  
XX      02-OCT-2003; 2003WO-US033332.  
XX  
XX      17-OCT-2002; 2002US-0419268P.  
XX      (PHAA ) PHARMACIA CORP.  
XX  
XX      Broschat KO, Crosby SD;  
XX      WPI; 2004-348453/32.  
XX  
XX      New compounds, particularly antisense oligonucleotides targeted to a  
PT      nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase  
PT      (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,  
PT      ischemia/reperfusion injury.  
XX  
XX      Claim 4; SEQ ID NO 508; 175pp; English.  
XX  
XX      The present invention relates to a compound which specifically hybridizes  
CC      with a nucleic acid molecule encoding GFAT, and inhibits the expression  
CC      of GFAT. Specifically claimed are antisense oligonucleotides capable of  
CC      modulating the expression of GFAT, and which comprise any of the 3063  
CC      sequences of 20 base pairs, given in the specification. The compound,  
CC      composition and methods are useful for treating a disease or condition  
CC      associated with GFAT, such as a disease or condition, e.g. diabetes, a  
CC      cardiovascular or neurological disorder, ischemia/reperfusion injury.  
CC      They are also useful in research and diagnostics for modulating the  
CC      expression of GFAT. The present sequence represents a chimeric  
CC      phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these  
CC      oligonucleotides inhibit human GFAT expression.  
XX  
XX      Sequence 20 BP; 2 A; 6 C; 9 G; 3 T; 0 U; 0 Other;  
SQ  
  
Query Match      0.4%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 1.7e+03;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY      1473 TCTCGCGGCGCGCGGCC 1490  
          ||||| ||||| |||||  
DB      3 TCTCGCGGCGCTCGGGGCC 20  
  
RESULT 1724  
ADP76486  
ID      ADP76486 standard; DNA; 20 BP.  
XX  
XX      ADP76486;  
XX  
XX      12-AUG-2004 (first entry)  
XX  
XX      Chimeric phosphorothioate oligonucleotide #285.  
DE  
XX      GFAT; Antidiabetic; Cardiant;  
KW      Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;  
KW      reperfusion; ss.  
XX  
XX      Synthetic.  
OS  
XX      Key      Location/Qualifiers  
FH      modified_base      1. .4  
FT      /*tag= a  
FT      /mod_base= other  
FT      /note= "2-methoxyethyl wing"  
FT      modified_base      17. .20
```

```
FT      /*tag= b  
FT      /mod_base= other  
FT      /note= "2-methoxyethyl wing"  
XX  
XX      WO2004035763-A2.  
XX  
XX      29-APR-2004.  
XX  
XX      02-OCT-2003; 2003WO-US033332.  
XX  
XX      17-OCT-2002; 2002US-0419268P.  
XX      (PHAA ) PHARMACIA CORP.  
XX  
XX      Broschat KO, Crosby SD;  
XX      WPI; 2004-348453/32.  
XX  
XX      New compounds, particularly antisense oligonucleotides targeted to a  
PT      nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase  
PT      (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,  
PT      ischemia/reperfusion injury.  
XX  
XX      Claim 4; SEQ ID NO 285; 175pp; English.  
XX  
XX      The present invention relates to a compound which specifically hybridizes  
CC      with a nucleic acid molecule encoding GFAT, and inhibits the expression  
CC      of GFAT. Specifically claimed are antisense oligonucleotides capable of  
CC      modulating the expression of GFAT, and which comprise any of the 3063  
CC      sequences of 20 base pairs, given in the specification. The compound,  
CC      composition and methods are useful for treating a disease or condition  
CC      associated with GFAT, such as a disease or condition, e.g. diabetes, a  
CC      cardiovascular or neurological disorder, ischemia/reperfusion injury.  
CC      They are also useful in research and diagnostics for modulating the  
CC      expression of GFAT. The present sequence represents a chimeric  
CC      phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these  
CC      oligonucleotides inhibit human GFAT expression.  
XX  
XX      Sequence 20 BP; 4 A; 2 C; 6 G; 8 T; 0 U; 0 Other;  
SQ  
  
Query Match      0.4%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 1.7e+03;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY      3237 TAGTTGGAGTGATGCCA 3254  
          ||||| ||||| |||||  
DB      3 TAGTTGGTGATGCCA 20  
  
RESULT 1725  
ADP10786  
ID      ADP10786 standard; DNA; 20 BP.  
XX  
XX      ADP10786;  
XX  
XX      12-AUG-2004 (first entry)  
XX  
XX      Set 1 left PCR primer for marker probe #131.  
XX  
XX      transplant rejection; immune system; rheumatoid arthritis; lupus;  
KW      inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.  
XX  
XX      Homo sapiens.  
XX  
XX      WO2004042346-A2.  
XX  
XX      21-MAY-2004.  
XX  
XX      24-APR-2003; 2003WO-US012946.  
XX  
XX      24-APR-2002; 2002US-00131831.  
PR      20-DEC-2002; 2002US-00325899.  
XX
```

PA (EXPR-) EXPRESSION DIAGNOSTICS INC.
 XX Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
 PI Rosenberg S;
 XX WPI; 2004-400724/37.
 DR
 XX Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
 XX pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
 PT rejection, in an individual, comprises detecting the expression level of
 PT the genes.
 XX
 XX Claim 58; SEQ ID NO 795; 1762pp; English.
 PS
 XX The present invention relates to diagnosing or monitoring transplant
 XX rejection, e.g. cardiac or kidney transplant rejection, in an individual
 CC comprises detecting the expression level of one or more genes. The
 CC methods, system and kits are useful in diagnosing or monitoring
 CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
 CC islet, lung, bone marrow or stem cell transplant rejection,
 CC xenotransplant rejection or mechanical organ replacement rejection, in an
 CC individual. The method is also useful in assessing the immune status of
 CC an individual. The methods are also useful in diagnosing and monitoring
 CC diseases that involve the immune system, e.g. rheumatoid arthritis,
 CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
 CC viral, bacterial or fungal infection. The present sequence represents a
 CC primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
 CC of allograft rejection and other disorders.
 XX
 XX Sequence 20 BP; 4 A; 2 C; 10 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 853 GAGGAGGAGCTGCTGGAG 870
 Db 1 GAGGTGGAGCTGCTGGCAG 18
 RESULT 1726
 ADOS9509
 ID ADOS9509 standard; DNA; 20 BP.
 XX
 XX ADOS9509;
 AC
 XX 26-AUG-2004 (first entry)
 DT
 XX Human death-associated protein kinase 1 gene inhibitory oligo ISIS233836.
 DE
 XX ss; death-associated protein kinase 1; gene expression; diagnosis;
 KW dysregulation; cellular apoptosis.
 XX
 XX Homo sapiens.
 OS
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone, all C bases are 5-
 FT methylcytidine bases"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyl nucleobase"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyl nucleobase"
 XX
 XX WO2004048531-A2.
 PN
 XX 10-JUN-2004.
 PD

XX 21-NOV-2003; 2003WO-US037445.
 XX 22-NOV-2002; 2002US-00303588.
 PR
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Dobie KW;
 PI
 XX WPI; 2004-441167/41.
 DR
 XX New compound targeted to a nucleic acid encoding death-associated protein
 PT kinase 1, useful for modulating death-associated protein kinase 1
 PT expression, or treating diseases associated with expression of death-
 PT associated protein kinase 1.
 XX
 XX Claim 25; SEQ ID NO 43; 103pp; English.
 PS
 XX The invention relates to a compound 8-80 nucleobases in length targeted
 CC to a nucleic acid molecule encoding death-associated protein kinase 1,
 CC where the compound specifically hybridizes with the nucleic acid molecule
 CC encoding death-associated protein kinase 1 and inhibits the expression of
 CC death-associated protein kinase 1. The compound is useful for the
 CC modulation of death-associated protein kinase 1 expression and for
 CC diagnosis and treatment of diseases associated with expression of death-
 CC associated protein kinase 1 expression. The disease or condition is
 CC dysregulation of cellular apoptosis. The compound is also useful in
 CC research and diagnostics, and for drug discovery to elucidate
 CC relationships that exist between death-associated protein kinase 1 and a
 CC disease state, phenotype, or condition. This sequence represents an
 CC inhibitory oligonucleotide of the invention which is targeted to the
 CC human death-associated protein kinase 1 gene (ADOS9470).
 XX
 XX Sequence 20 BP; 9 A; 2 C; 1 G; 8 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2824 ATATATACATATATATAT 2841
 Db 2 ATATATATATACATAT 19
 RESULT 1727
 ADOS9509/c
 ID ADOS9509 standard; DNA; 20 BP.
 XX
 XX ADOS9509;
 AC
 XX 26-AUG-2004 (first entry)
 DT
 XX Human death-associated protein kinase 1 gene inhibitory oligo ISIS233836.
 DE
 XX ss; death-associated protein kinase 1; gene expression; diagnosis;
 KW dysregulation; cellular apoptosis.
 XX
 XX Homo sapiens.
 OS
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone, all C bases are 5-
 FT methylcytidine bases"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyl nucleobase"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyl nucleobase"
 XX
 XX WO2004048531-A2.
 PN
 XX 10-JUN-2004.
 PD


```
XX PR 09-DEC-2002; 2002US-00316243.
XX PA (ISIS-) ISIS PHARM INC.
XX PI
XX PT Dobie KW, Jain R;
XX DR WPI; 2004-440336/41.
XX PS
XX PT New oligonucleotide compound that inhibits expression of BAF53, useful
XX PT for preparing a composition for treating hyperproliferative disorder,
XX PT e.g. cancer.
XX XX
XX PS Example 15; SEQ ID NO 167; 72pp; English.
XX CC The invention relates to a compound, having a sequence comprising 8-80 bp
XX CC targeted to a nucleic acid encoding BAF53 (a member of the BAF complex
XX CC (BRG1/brom-associated factor), BRG1-associated factor 53kDa which is an
XX CC actin-related protein), specifically hybridises with the nucleic acid
XX CC encoding BAF53 comprising 28001-bp sequence (derived from human
XX CC chromosome 3) and inhibits expression of BAF53, i.e. an antisense
XX CC oligonucleotide. Also included are inhibiting the expression of BAF53 in
XX CC cells or tissues, screening for a modulator of BAF53, a diagnostic method
XX CC for identifying a disease state, a kit or assay device comprising the
XX CC compound and treating an animal having a disease or condition associated
XX CC with BAF53. The oligonucleotide compound is useful for preparing a
XX CC composition for treating hyperproliferative disorder, e.g. cancer or a
XX CC tumour. The BAF53 gene is located on chromosome 3. The present sequence
XX CC is a BAF53 genomic DNA target sequence for an antisense oligonucleotide.
XX SQ Sequence 20 BP; 4 A; 1 C; 8 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3067 TCCACACCCCACTT 3084
DB 19 TCACACATCCCACTT 2
RESULT 1730
ADP21189
ID ADP21189 standard; DNA; 20 BP.
XX AC ADP21189;
XX DT 09-SEP-2004 (first entry)
XX DE Heavy chain variable region (VH) 5' PCR primer hVH4a.1, SEQ:4.
XX KW Human; antibody; immunoglobulin; antigen-specific lymphocyte;
XX KW B-lymphocyte; T-lymphocyte; microwell chip; detection; isolation;
XX KW selection; antigen-specific receptor; monoclonal antibody;
XX KW T-cell receptor; immunotherapy; gene therapy; variable region;
XX KW heavy chain; VH; PCR; primer; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO2004051266-A1.
XX PD 17-JUN-2004.
XX PF 30-SEP-2003; 2003WO-JP012500.
XX PR 14-NOV-2002; 2002JP-00331031.
XX PR 29-NOV-2002; 2002JP-00346728.
XX PA (MURA/) MURAGUCHI A.
XX PA (KISH/) KISHI H.
XX PA (TAMI/) TAMIYA E.
XX PA (SUZU/) SUZUKI M.
XX PR 09-DEC-2002; 2002US-00316243.
XX PA (ISIS-) ISIS PHARM INC.
XX PI
XX PT Dobie KW, Jain R;
XX DR WPI; 2004-440336/41.
XX PS
XX PT New oligonucleotide compound that inhibits expression of alpha-methylacyl
XX PT -CoA racemase, useful for preparing a composition for treating a
XX PT condition involving defects in fatty acid metabolism.
XX XX
XX PI Muraguchi A, Kishi H, Tamiya E, Suzuki M;
XX DR WPI; 2004-461173/43.
XX PT Microwell array chip for detecting antigen specific lymphocyte, has shape
XX PT and dimension to store lymphocyte in microwell.
XX PS Example 5; SEQ ID NO 4; 92pp; Japanese.
XX CC The invention relates to a microwell array chip for detecting a single
XX CC antigen-specific lymphocyte. Each microwell of the chip has the shape and
XX CC size to accommodate one lymphocyte only. The lymphocyte may be a B or a T
XX CC lymphocyte. The invention also relates to methods for detecting,
XX CC isolating and selecting an antigen-specific lymphocyte; a method of
XX CC cloning a gene encoding an antigen-specific receptor (e.g., an
XX CC immunoglobulin or a T-cell receptor) from an antigen-specific lymphocyte
XX CC via reverse transcription-PCR (RT-PCR); a method of manufacturing a
XX CC monoclonal antibody using an antigen-specific immunoglobulin gene cloned
XX CC using the cloning method of the invention; and a method of manufacturing
XX CC gene therapy material using an antigen-specific T-cell receptor gene
XX CC cloned using the cloning method. The method of the invention is useful
XX CC for the efficient detection of a single antigen-specific lymphocyte,
XX CC genes from which may be isolated and cloned for use in various
XX CC immunotherapy and gene therapy methods. Sequences ADP21186-ADP21233
XX CC represent PCR primers used to clone the heavy and light chain variable
XX CC regions (ADP21234 and ADP21236) of an antibody produced by a single human
XX CC B lymphocyte.
XX SQ Sequence 20 BP; 1 A; 7 C; 5 G; 6 T; 0 U; 1 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.7e+03;
Matches 16; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 932 TCATCCTGCTGGTGGCGGCT 951
DB 1 TCCTCTCTGCTGGCGAGCT 20
RESULT 1731
ADP56824/c
ID ADP56824 standard; DNA; 20 BP.
XX AC ADP56824;
XX DT 09-SEP-2004 (first entry)
XX DE Human AMACR DNA targeted for antisense therapy - SEQ ID 95.
XX KW alpha-methylacyl-CoA racemase; AMACR; fatty acid metabolism;
XX KW gene therapy; ds; human; antisense therapy target.
XX OS Homo sapiens.
XX PN WO2004052300-A2.
XX PD 24-JUN-2004.
XX PF 10-DEC-2003; 2003WO-US039230.
XX PR 10-DEC-2002; 2002US-00316540.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Dobie KW, Jain R;
XX DR WPI; 2004-468694/44.
XX PT New oligonucleotide compound that inhibits expression of alpha-methylacyl
XX PT -CoA racemase, useful for preparing a composition for treating a
XX PT condition involving defects in fatty acid metabolism.
XX XX
```


CC gene; a recombinant expression system comprising a nucleic acid sequence
 CC that includes an open reading frame derived from PS112 operably linked to
 CC a control sequence compatible with a desired host, where the nucleic acid
 CC sequence has at least 50% identity to a sequence of SEQ ID NOS: 1-10, or
 CC their fragments or complements; a cell transfected with the recombinant
 CC expression system or with a nucleic acid sequence encoding at least one
 CC PS112 epitope, where the nucleic acid sequence comprises SEQ ID NOS: 1-
 CC 10, or their fragments or complements; a composition of matter comprising
 CC a PS112 polynucleotide or its fragment, where the polynucleotide has at
 CC least 50% identity to a sequence of SEQ ID NOS: 2-10, or their
 CC complements, or has at least 50% identity with fragments of a
 CC polynucleotide of SEQ ID NOS: 4-8; and a gene or its fragment comprising
 CC DNA having at least 50% identity with SEQ ID NOS: 9 or 10. The method is
 CC useful for detecting the presence of a target PS112 polynucleotide in a
 CC test sample. The methods, test kit, polynucleotides and polypeptides, and
 CC antibodies are useful in detecting, diagnosing, staging, monitoring,
 CC prognosticating, preventing and treating prostate diseases, tumours or
 CC metastases or in determining the predisposition of an individual to
 CC diseases and conditions of the prostate, e.g. prostate cancer. This
 CC sequence represents a reverse transcriptase PCR primer used to isolate
 CC DNA encoding PS112.

XX SQ Sequence 20 BP; 0 A; 9 C; 0 G; 11 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 1.7e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 921 CTTCTTCCTGTTTCATCCT 938
 |||||
 Db 2 CTTCTTCCTGTTTCCT 19

RESULT 1734
 AAQ25299
 ID AAQ25299 standard; DNA; 21 BP.
 XX AC AAQ25299;
 XX DT 25-MAR-2003 (revised)
 XX DT 23-DEC-1992 (first entry)
 XX DE ODN6 - control oligonucleotide.
 XX KW Transcription; inhibition; duplex; anti-sense therapy; RNA; polymerase;
 XX KW triple helix; triplex; ss.
 XX OS Synthetic.
 XX PN WO9210590-A1.
 XX PD 25-JUN-1992.
 XX PF 10-DEC-1991; 91WO-05009321.
 XX PR 10-DEC-1990; 90US-00625680.
 XX PA (GILE-) GILEAD SCI INC.
 XX PI Toole JU;
 XX PX WPI; 1992-234645/28.
 XX DR Inhibiting transcription of duplex DNA in anti-sense therapy and
 PT diagnosis - by contacting the transcribed region of DNA with an oligomer
 PT to form triple helix.
 XX PS Table 1; Page 26; 45pp; English.

XX The oligomer is used as a control oligonucleotide for studying inhibition
 CC of transcription of duplex DNA. Similar oligomers are capable of binding
 CC to the transcribed region of the DNA so as to form a triple helix. This
 CC interaction is compared to the binding of the control oligonucleotide to

CC give accurate results. The target region may lie within an exon or an
 CC intron and the oligomer forms a triple helix by exploiting the GT motif
 CC (i.e. the oligomer is purine rich). The oligomer is useful in antisense
 CC therapy. It can also be used (opt. in labelled form) diagnostically to
 CC detect target DNA or RNA by hybridisation. See also AAQ25290-300.
 CC (Updated on 25-MAR-2003 to correct PN field.)

XX SQ Sequence 21 BP; 0 A; 0 C; 11 G; 10 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2323 GTGTGTGTGTGTGTGTGT 2340
 |||||
 Db 2 GTGTGTGTGTGTGTGT 19

RESULT 1735
 AAQ36825/c
 ID AAQ36825 standard; DNA; 21 BP.
 XX AC AAQ36825;
 XX DT 25-MAR-2003 (revised)
 XX DT 22-JUN-1993 (first entry)
 XX DE Oligomer SM 91 used in construction of SSP polypeptides.
 XX KW Heptad; plants; custom tailored storage proteins; in vivo; expression;
 XX KW ss.
 XX OS Synthetic.
 XX PN WO9303160-A1.
 XX PD 18-FEB-1993.
 XX PF 07-AUG-1992; 92WO-US006412.
 XX PR 09-AUG-1991; 91US-00743006.
 XX PR (DUPO) DU PONT DE NEMOURS & CO E I.
 XX PI Falco SC, Keeler SJ, Rice JA;
 XX PX WPI; 1993-076517/09.

XX Synthetic polypeptide(s) contg. specified heptad units - expressed in
 PT vivo in plants to serve as custom-tailored storage proteins with
 PT specified aminoacid content.
 XX PS Disclosure; Page 112; 176pp; English.

XX The sequence represents the DNA sequence encoding a synthetic heptad
 CC polypeptide. The synthetic polypeptide can be expressed in vivo in plants
 CC to serve as a synthetic seed storage protein which can be custom-tailored
 CC for specific end-user requirements. The DNA encoding the heptad may be
 CC used to transform plants to increase the content of partic. amino acids
 CC such as lysine or methionine in seeds or leaves. See also AAQ36810-28,
 CC AAQ37265-301. (Updated on 25-MAR-2003 to correct PN field.)
 XX SQ Sequence 21 BP; 2 A; 9 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1353 GGAGATGATGAAGATGAT 1370
 |||||
 Db 18 GGAGAGATGAAGAAGAT 1

```

RESULT 1736
AAQ94989/c
ID AAQ94989 standard; DNA; 21 BP.
XX
XX AC AAQ94989;
XX
XX DT 15-JUL-1996 (first entry)
XX
XX DE SSP10 Oligonucleotide SM 91.
XX
XX KW Lysine; synthetic storage protein; SSP; vector; PSK6;
XX KW dihydrodipicolinic acid synthase; corn; maize; soybean;
XX KW Glycine max; transgenic plant; essential amino acid; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT misc_feature 1..21
XX FT /*tag= a
XX FT /standard_name= "SM 91"
XX
XX PN W09515392-A1.
XX
XX PD 08-JUN-1995.
XX
XX PF 21-NOV-1994; 94WO-US013190.
XX
XX PR 30-NOV-1993; 93US-00160117.
XX
XX PR 17-JUN-1994; 94US-00261661.
XX
XX XX (DUPO ) DU PONT DE NEMOURS & CO E I.
XX
XX PI Falco SC, Keeler SJ, Rice JA;
XX
XX WPI; 1995-215272/28.
XX
XX PT New chimeric gene providing increased lysine content in plant seeds -
XX PT contains dihydrodipicolinic acid synthase gene coupled to chloroplast
XX PT transport sequence and seed specific promoter, also new plants of
XX PT improved nutritional value.
XX
XX PS Example 8; Page 78; 180pp; English.
XX
XX CC Oligonucleotide SM90 (AAQ94988) and complementary sequence SM91
XX CC (AAQ94989) code for heptad peptide SSP10 (AAR78247). They were annealed
XX CC and used in the construction a DNA fragment (see also AAQ94996) that was
XX CC inserted into vector PSK6 (see also AAR78236). The DNA fragment codes for
XX CC a synthetic storage protein (SSP) contg. multiple lysine-rich heptad
XX CC repeats (see AAR78253). This can be expressed in the seeds of transformed
XX CC plants, e.g. soybean and corn, to increase lysine content
XX
XX SQ Sequence 21 BP; 2 A; 9 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1353 GGAGATGATGATGATGAT 1370
    ||||| ||||| ||||| |||||
DB 18 GGAGAGATGATGATGAT 1

RESULT 1737
AAT27275/c
ID AAT27275 standard; DNA; 21 BP.
XX
XX AC AAT27275;
XX
XX DT 29-NOV-1996 (first entry)
XX
XX DE Primer FTFLM for DNA polymerase I gene primer walking.
XX
XX KW DNA polymerase I; truncated; exonuclease free; holoenzyme; universal;
XX KW DNA sequencing; amplification; exonuclease free; holoenzyme; universal;
XX KW ligase chain reaction; thermal cycle labelling; PCR; ss.
XX
XX OS Synthetic.
XX
XX PN W09614405-A2.
XX
XX PD 17-MAY-1996.
XX
XX PF 03-NOV-1995; 95WO-US015327.
XX
XX PR 04-NOV-1994; 94US-00334645.
XX
XX PA (MOLE-) MOLECULAR BIOLOGY RESOURCES INC.
XX
XX PI Mueller RD, Skowron PM, Swaminathan N, Piehl RF;
XX
XX WPI; 1996-251756/25.

DNA sequencing; amplification; polymerase chain reaction; primer;
ligase chain reaction; thermal cycle labelling; PCR; ss.
Synthetic.
W09614405-A2.
17-MAY-1996.
03-NOV-1995; 95WO-US015327.
04-NOV-1994; 94US-00334645.
(MOLE-) MOLECULAR BIOLOGY RESOURCES INC.
Mueller RD, Skowron PM, Swaminathan N, Piehl RF;
WPI; 1996-251756/25.

Biologically active fragments of Thermus flavus DNA polymerase - useful
for DNA sequencing, polymerase chain reaction, thermal cycle labelling
and ligase chain reaction, etc.
Example 5; Page 45; 139pp; English.
AAT27263-88 were synthesised for primer walking to obtain the remainder
of the sequence of the Thermus flavus DNA polymerase I (holoenzyme) gene.
The Tfl DNA pol I sequence can be used to generate a truncated DNA
polymerase coding sequence, e.g. an exonuclease-free fragment (Tfl exo-
fragment). This recombinant polymerase is thermostable and can be used in
applications such as DNA sequencing, polymerase chain reaction,
(universal) thermal cycle labelling and ligase chain reaction.
XX
XX SQ Sequence 21 BP; 7 A; 2 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2684 TCCAGGCTTCCCACTTC 2701
    ||||| ||||| ||||| |||||
DB 20 TCCAGGCTTCCCACTTC 3

RESULT 1738
AAT27276
ID AAT27276 standard; DNA; 21 BP.
XX
XX AC AAT27276;
XX
XX DT 29-NOV-1996 (first entry)
XX
XX DE Primer RTFLN for DNA polymerase I gene primer walking.
XX
XX KW DNA polymerase I; truncated; exonuclease free; holoenzyme; universal;
XX KW DNA sequencing; amplification; polymerase chain reaction; primer;
XX KW ligase chain reaction; thermal cycle labelling; PCR; ss.
XX
XX OS Synthetic.
XX
XX PN W09614405-A2.
XX
XX PD 17-MAY-1996.
XX
XX PF 03-NOV-1995; 95WO-US015327.
XX
XX PR 04-NOV-1994; 94US-00334645.
XX
XX PA (MOLE-) MOLECULAR BIOLOGY RESOURCES INC.
XX
XX PI Mueller RD, Skowron PM, Swaminathan N, Piehl RF;
XX
XX WPI; 1996-251756/25.

```

XX Biologically active fragments of *Thermus flavus* DNA polymerase - useful
PT for DNA sequencing, polymerase chain reaction, thermal cycle labelling
PT and ligase chain reaction, etc.
XX
PS Example 5; Page 45; 139pp; English.
XX
CC AAT27263-88 were synthesised for primer walking to obtain the remainder
CC of the sequence of the *Thermus flavus* DNA polymerase I (holoenzyme) gene.
CC The Tfl DNA pol I sequence can be used to generate a truncated DNA
CC polymerase coding sequence, e.g. an exonuclease-free fragment (Tfl exo-
CC fragment). This recombinant polymerase is thermostable and can be used in
CC applications such as DNA sequencing, polymerase chain reaction,
CC (universal) thermal cycle labelling and ligase chain reaction
XX
SQ Sequence 21 BP; 2 A; 10 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2684 TCCAGGCTTCCCACTTC 2701
Db 2 TCCAGGCTTCCCACTTC 19

RESULT 1739
AAV06474/C
ID AAV06474 standard; DNA; 21 BP.
XX
AC AAV06474;
XX
DT 01-MAY-1998 (first entry)
XX
DE Human genomic DNA exon 7 amplifying primer 2.
XX
KW Ovarian; epithelial cell line; drug screening; cancer research; human;
KW tumour; genomic; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
XX US5710038-A.
XX
PD 20-JAN-1998.
XX
PF 25-NOV-1994; 94US-00344960.
XX
PR 25-NOV-1994; 94US-00344960.
XX
PA (UYMO-) UNIV MONTREAL.
XX
PI Provencher D, Mes-Masson A;
XX
XX WPI; 1998-109820/10.
XX
PT Human ovarian epithelial cell lines - useful for cancer research, drug
PT screening, etc.
XX
PS Disclosure; Col 19-20; 19pp; English.
XX
CC This primer is used for the PCR amplification of the exon 7 of human
CC genomic DNA. This is used in the characterisation of human ovarian
CC epithelial cell lines TOV-21G (ATCC CRL 11730), TOV-112D (ATCC CRL
CC 11731), OV-90 (ATCC CRL 11732) and NOV-31 (ATCC CRL 11733). These cell
CC lines which are new function as models for studying the ovarian
CC epithelium under normal and pathological conditions, to assess the
CC expression of genes involved in tumour suppression or tumour promotion.
CC The cell lines can be used to screen for drugs that influence matrix
CC metalloprotease activity and to screen for compounds useful in human or
CC veterinary medicine through their influence on tumorigenicity, invasive
XX potential or metalloprotease activity

SQ Sequence 21 BP; 4 A; 2 C; 11 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2695 CCACCTTCCCACTTCGCC 2712
Db 21 CCACCTTCCCACTTCGCC 4

RESULT 1740
AAZ26100/C
ID AAZ26100 standard; DNA; 21 BP.
XX
AC AAZ26100;
XX
DT 30-NOV-1999 (first entry)
XX
DE Human polymorphic region 289.
XX
KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
KW cell viability; loss of heterozygosity; precancerous condition; ASI;
KW allele specific inhibitor; somatic cell; diagnosis; prevention;
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
KW graft versus host disease; malignant cell removal; bone marrow; ss.
XX
OS Homo sapiens.
XX
PN WO9841648-A2.
XX
PD 24-SEP-1998.
XX
PF 19-MAR-1998; 98WO-US005419.
XX
PR 20-MAR-1997; 97US-0041057P.
XX
PA (VARI-) VARIAGENICS INC.
XX
PI Housman D, Ledley FD, Stanton VP;
XX
XX WPI; 1998-521232/44.
XX
PT Identifying target genes for allele-specific drugs - used for diagnosis,
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
PT dysplastic lesions, endometriosis or graft versus host disease.
XX
PS Disclosure; Fig 7; 605pp; English.
XX
CC This invention describes a novel method for identifying an inhibitor
CC potentially useful for treatment of cancer, where the inhibitor is active
CC on a gene vital for cell growth or viability, and where the gene is
CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
CC used for preventing the development of cancer in a patient having a
CC precancerous condition, by administering to the patient a first allele
CC specific inhibitor (ASI) targeted to an allele of a first essential gene
CC present in cells of the precancerous condition, where the normal somatic
CC cells of the patient are heterozygous for the first gene, the inhibitor
CC is active on at least one but less than all allelic forms of the gene
CC present in a population and targets only one allelic form present in the
CC normal somatic cells, and the first gene. The products and methods can be
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
CC graft versus host disease. The method can also be used to remove
CC malignant cells from bone marrow transplants. AAZ25812-226825 represent
CC human polymorphic sites described in the method of the invention
XX
SQ Sequence 21 BP; 12 A; 2 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3316 TTAGGAGATTATTTT 3333
 ID AAZ26101 standard; DNA; 21 BP.
 XX AAZ26101;
 XX 30-NOV-1999 (first entry)
 XX Human polymorphic region 290.
 XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
 KW graft versus host disease; malignant cell removal; bone marrow; ss.
 XX Homo sapiens.
 OS WO9841648-A2.
 PN 24-SEP-1998.
 XX 19-MAR-1998; 98WO-US005419.
 XX 20-MAR-1997; 97US-0041057P.
 XX (VARI-) VARIAGENICS INC.
 XX Housman D, Ledley FD, Stanton VP;
 XX WPI; 1998-521232/44.
 XX Identifying target genes for allele-specific drugs - used for diagnosis,
 PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
 PT dysplastic lesions, endometriosis or graft versus host disease.
 XX Disclosure; Fig 7; 605pp; English.
 XX This invention describes a novel method for identifying an inhibitor
 CC potentially useful for treatment of cancer, where the inhibitor is active
 CC on a gene vital for cell growth or viability, and where the gene is
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
 CC used for preventing the development of cancer in a patient having a
 CC precancerous condition, by administering to the patient a first allele
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene
 CC present in cells of the precancerous condition, where the normal somatic
 CC cells of the patient are heterozygous for the first gene, the inhibitor
 CC is active on at least one but less than all allelic forms of the gene
 CC present in a population and targets only one allelic form present in the
 CC normal somatic cells, and the first gene. The products and methods can be
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
 CC graft versus host disease. The method can also be used to remove
 CC malignant cells from bone marrow transplants. AAZ25812-226825 represent
 CC human polymorphic sites described in the method of the invention
 XX Sequence 21 BP; 12 A; 2 C; 0 G; 7 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03; Indels 0; Gaps 0;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3316 TTAGGAGATTATTTT 3333
 ID AAZ26101 standard; DNA; 21 BP.
 XX AAZ26101;
 XX 30-NOV-1999 (first entry)
 XX Human polymorphic region 290.
 XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
 KW graft versus host disease; malignant cell removal; bone marrow; ss.
 XX Homo sapiens.
 OS WO9841648-A2.
 PN 24-SEP-1998.
 XX 19-MAR-1998; 98WO-US005419.
 XX 20-MAR-1997; 97US-0041057P.
 XX (VARI-) VARIAGENICS INC.
 XX Housman D, Ledley FD, Stanton VP;
 XX WPI; 1998-521232/44.
 XX Identifying target genes for allele-specific drugs - used for diagnosis,
 PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
 PT dysplastic lesions, endometriosis or graft versus host disease.
 XX Disclosure; Fig 7; 605pp; English.
 XX This invention describes a novel method for identifying an inhibitor
 CC potentially useful for treatment of cancer, where the inhibitor is active
 CC on a gene vital for cell growth or viability, and where the gene is
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
 CC used for preventing the development of cancer in a patient having a
 CC precancerous condition, by administering to the patient a first allele
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene
 CC present in cells of the precancerous condition, where the normal somatic
 CC cells of the patient are heterozygous for the first gene, the inhibitor
 CC is active on at least one but less than all allelic forms of the gene
 CC present in a population and targets only one allelic form present in the
 CC normal somatic cells, and the first gene. The products and methods can be
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
 CC graft versus host disease. The method can also be used to remove
 CC malignant cells from bone marrow transplants. AAZ25812-226825 represent
 CC human polymorphic sites described in the method of the invention
 XX Sequence 21 BP; 12 A; 2 C; 0 G; 7 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03; Indels 0; Gaps 0;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Db 18 TTAGGAATTTTATTTT 1

RESULT 1742
 AAZ26805
 ID AAZ26805 standard; DNA; 21 BP.
 XX AAZ26805;
 XX 30-NOV-1999 (first entry)
 XX Human polymorphic region 994.
 XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
 KW graft versus host disease; malignant cell removal; bone marrow; ss.
 XX Homo sapiens.
 OS WO9841648-A2.
 PN 24-SEP-1998.
 XX 19-MAR-1998; 98WO-US005419.
 XX 20-MAR-1997; 97US-0041057P.
 XX (VARI-) VARIAGENICS INC.
 XX Housman D, Ledley FD, Stanton VP;
 XX WPI; 1998-521232/44.
 XX Identifying target genes for allele-specific drugs - used for diagnosis,
 PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
 PT dysplastic lesions, endometriosis or graft versus host disease.
 XX Disclosure; Fig 7; 605pp; English.
 XX This invention describes a novel method for identifying an inhibitor
 CC potentially useful for treatment of cancer, where the inhibitor is active
 CC on a gene vital for cell growth or viability, and where the gene is
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
 CC used for preventing the development of cancer in a patient having a
 CC precancerous condition, by administering to the patient a first allele
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene
 CC present in cells of the precancerous condition, where the normal somatic
 CC cells of the patient are heterozygous for the first gene, the inhibitor
 CC is active on at least one but less than all allelic forms of the gene
 CC present in a population and targets only one allelic form present in the
 CC normal somatic cells, and the first gene. The products and methods can be
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
 CC graft versus host disease. The method can also be used to remove
 CC malignant cells from bone marrow transplants. AAZ25812-226825 represent
 CC human polymorphic sites described in the method of the invention
 XX Sequence 21 BP; 10 A; 2 C; 1 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03; Indels 0; Gaps 0;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3761 GAATTTCCGAAATAA 3778
 ID 4 GAATTTCCGAAATAA 21
 XX 4 GAATTTCCGAAATAA 21

RESULT 1743

```

AAZ18122/c
ID AAZ18122 standard; DNA; 21 BP.
AC
XX
AC AAZ18122;
XX
AC
XX 11-OCT-1999 (first entry)
DE
DE PTK 16 gene specific primer.
XX
XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KW primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9934016-A2.
XX
XX 08-JUL-1999.
XX
XX 28-DEC-1998; 98WO-IL000625.
XX
XX 29-DEC-1997; 97IL-00122793.
PR 16-OCT-1998; 98IL-00126627.
XX
XX (GENE-) GENENA LTD.
PA
PI Vidar B;
XX
XX WPI; 1999-419113/35.
DR P-PSDB; AAY14657.
DR
XX
PT Identifying and characterizing cells by comparing the pattern of gene
PT expression in a selected gene family.
XX
XX Claim 4; Page 43; 102pp; English.
XX
XX The invention provides a new method for identifying and characterising
CC cells. The method for determining the genetic proximity of a first cell
CC and a second cell comprises: (a) obtaining the first cell and the second
CC cell; (b) determining in the first cell and the second cell the pattern
CC of expression of genes in a selected gene family; and (c) calculating a
CC proximity index using a specified formula. The methods can be used for
CC characterising cells, e.g. for determining the origin of a cell, its
CC genetic status, whether it carries a genetic defect, or whether it is
CC transformed. They can be used for detecting a selected genetic defect in
CC an individual, e.g. a fetus. They can also be used for determining the
CC effect of a selected treatment on a test cell. They can also be used for
CC obtaining cells capable of expressing an homeobox related desired
CC property. The method uses reverse transcriptase polymerase chain reaction
CC (RT-PCR) for determining the pattern of gene expression in a selected
CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
CC in the RT-PCR reactions to determine the pattern of gene expression. The
CC gene family can be selected from a set of homeobox genes, kinase genes,
CC protein phosphatase genes, P450 enzyme genes, steroid receptor
CC superfamily genes or cadherin superfamily genes
XX
SQ Sequence 21 BP; 6 A; 9 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1801 GACGCTGCTGCTTTGGG 1818
|||||
DB 18 GACGCTGCTGCTTTGGG 1

RESULT 1744
AAZ18122/c
ID AAZ18112 standard; DNA; 21 BP.
XX

```

```

AC AAZ18112;
XX
XX 11-OCT-1999 (first entry)
XX
DE PTK 11 gene specific primer.
XX
XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KW primer; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
PN WO9934016-A2.
XX
XX 08-JUL-1999.
XX
XX 28-DEC-1998; 98WO-IL000625.
XX
XX 29-DEC-1997; 97IL-00122793.
PR 16-OCT-1998; 98IL-00126627.
XX
XX (GENE-) GENENA LTD.
PA
XX Vidar B;
XX
XX WPI; 1999-419113/35.
DR P-PSDB; AAY14647.
DR
XX
PT Identifying and characterizing cells by comparing the pattern of gene
PT expression in a selected gene family.
XX
XX Claim 4; Page 42; 102pp; English.
XX
XX The invention provides a new method for identifying and characterising
CC cells. The method for determining the genetic proximity of a first cell
CC and a second cell comprises: (a) obtaining the first cell and the second
CC cell; (b) determining in the first cell and the second cell the pattern
CC of expression of genes in a selected gene family; and (c) calculating a
CC proximity index using a specified formula. The methods can be used for
CC characterising cells, e.g. for determining the origin of a cell, its
CC genetic status, whether it carries a genetic defect, or whether it is
CC transformed. They can be used for detecting a selected genetic defect in
CC an individual, e.g. a fetus. They can also be used for determining the
CC effect of a selected treatment on a test cell. They can also be used for
CC obtaining cells capable of expressing an homeobox related desired
CC property. The method uses reverse transcriptase polymerase chain reaction
CC (RT-PCR) for determining the pattern of gene expression in a selected
CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
CC in the RT-PCR reactions to determine the pattern of gene expression. The
CC gene family can be selected from a set of homeobox genes, kinase genes,
CC protein phosphatase genes, P450 enzyme genes, steroid receptor
CC superfamily genes or cadherin superfamily genes
XX
SQ Sequence 21 BP; 9 A; 7 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1800 TGACGCTGCTGCTTTGGG 1817
|||||
DB 19 TGACGCTGCTGCTTTGGG 2

RESULT 1745
AAZ18114/c
ID AAZ18114 standard; DNA; 21 BP.
XX
XX AAZ18114;
AC
XX
XX 11-OCT-1999 (first entry)
DT

```


KW primer; ss.
XX Synthetic.
OS Homo sapiens.
XX
PN WO9934016-A2.
XX
XX
XX 08-JUL-1999.
XX
XX 28-DEC-1998; 98WO-11000625.
XX
XX 29-DEC-1997; 97IL-00122793.
PR 16-OCT-1998; 98IL-00126627.
XX
XX (GENE-) GENENA LTD.
XX
XX Vider B;
PI
XX WPI; 1999-419113/35.
DR P-PSDB; AAY14641.
XX
XX Identifying and characterizing cells by comparing the pattern of gene expression in a selected gene family.
PT
XX
XX Claim 4; Page 42; 102pp; English.
XX
XX The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell the pattern of expression of genes in a selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is transformed. They can be used for detecting a selected genetic defect in an individual, e.g. a fetus. They can also be used for determining the effect of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected gene family. Sequences AAZ17803-218342 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, protein phosphatase genes, P450 enzyme genes, steroid receptor superfamily genes or cadherin superfamily genes
XX
XX Sequence 21 BP; 6 A; 9 C; 5 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1801 GACGCTGTCCTTGGG 1818
DB 18 GACGCTGTCCTTGGG 1
RESULT 1748
AA00349/C
ID AAX00349 standard; DNA; 21 BP.
XX
XX AAX00349;
XX
XX 23-APR-1999 (first entry)
DT
XX Human leukocyte antigen class II type PCR primer I2-SD36.
DE
XX Human leukocyte antigen class II type; HLA class II type;
KW human leukocyte antigen class II type; HLA class II type;
XX histocompatibility locus antigen class II; PCR primer; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX

PN EP892069-A2.
XX
XX 20-JAN-1999.
XX
XX 25-JUN-1998; 98EP-00111696.
PF
XX 26-JUN-1997; 97EP-00110438.
PR
XX (BIOT-) BIOTEST AG.
PA
XX Blasczyk R;
PI
XX WPI; 1999-083585/08.
DR
XX Determining the Human Leukocyte Antigen Class II type Histocompatibility antigens - by using new intron-specific oligonucleotide primers for sequence specific primer PCR and sequencing.
PT
XX
XX Claim 4; Fig 3; 36pp; English.
XX
XX A method has been developed of determining the Human Leukocyte Antigen class II (HLA Class II) group type of a subject. The method comprises: (i) amplifying a target DNA sample from a subject using a particular HLA group-specific primer pair (sequence specific primer PCR - SSP-PCR); and (ii) determining whether a nucleic acid product is produced, therefore identifying the group type. AAX00303 to AAX00396 represent specifically claimed oligonucleotide primer for use in the above method. These oligonucleotides are useful for determining the HLA Class II type of a patient sample, by identifying the specific alleles present and determining the group specificity of alleles. Steps (i) and (ii) in the method are diagnostically useful for histocompatibility analysis to see if donor and recipient groups match. The new sequences are useful for providing an insight into the genetic relationship between different alleles of HLA Class II genes. The high resolution, nucleic acid based method using the intron-specific primers is more efficient than prior art methods using exon based primers, as few exon sequences offer conserved primer binding sites, resulting in a limited number of primer pairs and insufficient specificity for alleles, as allelic variations exist between the primer sites. The SSP-PCR method allows separation of haplotypes in 95% of patient samples, allowing resolution of cis-trans linkages of heterozygous sequencing results which cannot be achieved with other protocols
XX
XX Sequence 21 BP; 7 A; 8 C; 1 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2316 TCTGTGTGTGTGTGTGTG 2333
DB 18 TCTGAGAGTGTGTGTGTG 1
RESULT 1749
AA52878/C
ID AAX52878 standard; DNA; 21 BP.
XX
XX AAX52878;
AC
XX 05-JUL-1999 (first entry)
DT
XX Adenosine A2b receptor antisense oligonucleotide.
DE
XX Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease; allergic rhinitis;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;

```

KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
XX 17-SEP-1998; 98WO-US019419.
XX
PF 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
XX (UYEC-) UNIV EAST CAROLINA.
PA
XX
XX Nyce JW;
PI
XX WPI; 1999-229400/19.
DR
XX
XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
PT
XX
XX Example 6; Page 93; 120pp; English.
PS
XX The specification describes antisense oligonucleotides (AAK52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
CC end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC from sequences AAK55272-74. These multiple target oligonucleotides
CC (specifically AAK55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX
XX Sequence 21 BP; 1 A; 9 C; 11 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1180 CGGGCCCGGCTGACCCCTG 1197
DB 20 CGGGCCCGGCTGCCCCG 3

RESULT 1750
AAK09096
ID AAK09096 standard; DNA; 21 BP.
XX
AC AAK09096;
XX
XX 14-JUN-1999 (first entry)
DT
DE
DE Tumour necrosis factor alpha antisense oligonucleotide.
XX
XX Tumour necrosis factor alpha; TNF-alpha; antisense oligonucleotide; ASO;
KW inhibition; expression; treatment; disease; disorder; ss.
XX
XX Synthetic.
OS
XX Rattus rattus.
XX
XX WO9901139-A1.
PN

XX 14-JAN-1999.
XX
XX 02-JUL-1998; 98WO-US013711.
XX
XX 03-JUL-1997; 97US-0051705P.
XX
XX (UYJE-) UNIV JEFFERSON THOMAS.
PA
XX
XX Tu G, Israel Y;
XX
XX WPI; 1999-105767/09.
XX
XX Generation of antisense oligonucleotides - by specifically targeting a
PT GGA motif found in mRNA sequences.
PT
XX
XX Example 3; Page 40; 55pp; English.
PS
XX
XX Antisense oligonucleotides (ASO) for inhibiting a tumour necrosis factor-
CC alpha (TNF-alpha) gene in an animal, preferably a human, comprise 12-50
CC nucleotides, 90% of which are complementary to a region of mRNA
CC containing a GGA sequence motif. The ASO is used to inhibit expression
CC of a gene in an animal and for treating the animal when afflicted with a
CC disease or disorder characterised by the presence of an mRNA from a gene
CC containing a GGA motif. The ASO are specifically targeted to a GGA
CC sequence motif found in mRNA from a gene. A study of known ASO has shown
CC that at least half of the most efficacious ASO's contain one or more TCCC
CC motifs. This ASO is designated TJU-0656 and is based on and targeted
CC against the rat TNF-alpha sequence
XX
XX Sequence 21 BP; 0 A; 8 C; 6 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1806 CTGGTCCTTTGGGTCCT 1823
DB 1 CTGGTCCTTTGGGTCCT 18

RESULT 1751
AAC69305
ID AAC69305 standard; DNA; 21 BP.
XX
AC AAC69305;
XX
XX 29-JAN-2001 (first entry)
DT
DE
DE Human ABC1 gene promoter polymorphic site, SEQ ID NO:204.
XX
XX Human ABC1 cholesterol transporter; chromosome 9q31;
KW ATP-binding cassette; HDL deficiency disorder; high density lipoprotein;
KW Tangier disease; TD; familial HDL deficiency; FHA; polymorphism;
KW cardiovascular disease; coronary artery disease; coronary restenosis;
KW cerebrovascular disease; peripheral vascular disease;
KW Alzheimer's disease; Niemann-Pick disease; Huntington's disease;
KW X-linked adrenoleukodystrophy; cancer; gene therapy; genetic diagnosis;
KW prognosis; prophylaxis; drug screening; transgenic animal; ds.
XX
XX Homo sapiens.
OS
XX
XX WO200055318-A2.
PN
XX
XX 21-SEP-2000.
PD
XX
XX 15-MAR-2000; 2000WO-IB000532.
XX
XX 15-MAR-1999; 99US-0124702P.
PR 08-JUN-1999; 99US-0138048P.
PR 17-JUN-1999; 99US-0139600P.
PR 01-SEP-1999; 99US-0151977P.
XX
XX

```

PA (UYBR-) UNIV BRITISH COLUMBIA.
 PA (XENO-) XENON BIORESEARCH INC.
 XX Hayden MR, Wilson AR, Pimstone SN;
 XX WPI; 2000-587528/55.
 DR
 XX
 XX
 PT New ABC1 polypeptide is useful for treating diseases associated with ABC1
 PT biological activity, e.g. Alzheimer's disease, Huntington's disease and
 PT cancer.
 XX
 XX
 PS Example; Fig 11; 229pp; English.
 PS
 CC The invention relates to the human ABC1 cholesterol transporter protein
 CC (B38082) and to nucleic acid sequences (C9120) which encode it. ABC1 is
 CC a member of the ATP-binding cassette (ABC transporter) superfamily of
 CC proteins, and plays a crucial role in cholesterol transport, particularly
 CC intracellular cholesterol trafficking in monocytes and fibroblasts, being
 CC involved in cholesterol efflux from the cell. The gene encoding ABC1 is
 CC located on chromosome 9q31, and mutations in this gene are associated
 CC with two genetic HDL (high density lipoprotein) deficiency disorders,
 CC Tangier disease (TD) and familial HDL deficiency (FHA). These diseases
 CC are distinguishable in that TD is an autosomal recessive disorder, while
 CC FHA is inherited as an autosomal dominant trait. Low levels of HDL ("good
 CC cholesterol") in the blood correlate with a high risk of cardiovascular
 CC disease, particularly coronary artery disease, but also cerebrovascular
 CC disease, coronary restenosis, and peripheral vascular disease.
 CC Conversely, a high level of HDL has protective effects against
 CC cardiovascular disease. The invention provides genetic constructs and
 CC transgenic cells and non-human animals comprising human ABC1 nucleic
 CC acids, and methods of gene therapy for the treatment or prevention of
 CC cardiovascular disease comprising the administration of an expression
 CC vector encoding ABC1 or an active fragment thereof. The invention also
 CC encompasses compounds which mimic ABC1 activity, compounds which
 CC stimulate ABC1 expression and methods of screening for such compounds. It
 CC further relates to methods for determining whether a patient has an
 CC increased risk for cardiovascular disease due to polymorphisms in the
 CC ABC1 gene. Human ABC1 proteins and nucleotides can be used to treat or
 CC prevent cardiovascular disease, especially coronary artery disease,
 CC cerebrovascular disease, coronary restenosis or peripheral vascular
 CC disease. They may also be used in the treatment of diseases associated
 CC with ABC1 biological activity, such as Alzheimer's disease, Niemann-Pick
 CC disease, Huntington's disease, X-linked adrenoleukodystrophy and cancer.
 CC The invention specifically excludes proteins with the exact amino acid
 CC sequences of GenBank Accession No: CAA10005.1 and X75926, and the nucleic
 CC acid with the exact sequence as GenBank Accession No: AJ012376.1. The
 CC present sequence represents a polymorphic site of the human ABC1 gene
 XX
 SQ Sequence 21 BP; 2 A; 5 C; 10 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 497 ACACGCTGGACGTGCTGG 514
 DB 1 ACACGCTGGGCTGCTGG 18
 RESULT 1752
 AAA32322/c
 ID AAA32322 standard; DNA; 21 BP.
 XX
 AC AAA32322;
 XX
 XX 28-JUL-2000 (first entry)
 DT
 XX A2b adenosine receptor antisense oligonucleotide SEQ ID NO:10.
 DE
 XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;

KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX Homo sapiens.
 OS
 XX WO200009525-A2.
 PN
 XX 24-FEB-2000.
 PD
 XX 03-AUG-1999; 99WO-US017712.
 PF
 XX 03-AUG-1998; 98US-0095212P.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 PA
 XX Nyce JW;
 PI
 XX WPI; 2000-205971/18.
 DR
 XX New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers.
 XX
 PS Example 5; Page 257; 1343pp; English.
 XX
 CC The present invention describes a new composition comprising an antisense
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
 CC nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiashtmatic, cytostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
 CC impaired respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of the
 CC ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
 CC AAA33992) are specifically claimed ONs from the present invention. N.B.
 CC Sequences given in the disclosure of the present invention do not match
 CC up with their corresponding SEQ ID NO: sequences given in the sequence
 CC listing
 XX
 SQ Sequence 21 BP; 1 A; 9 C; 11 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1180 CGGGCCCGGCTGACCCCTG 1197
 DB 20 CGGGCCCGGCTGCGCCGG 3
 RESULT 1753
 AAA03716/c
 ID AAA03716 standard; DNA; 21 BP.
 XX
 AC AAA03716;
 XX
 XX 19-MAY-2000 (first entry)
 DT
 XX

DE Human adenosine A2b receptor antisense oligonucleotide SEQ ID NO:1000.
 XX
 KW Human; adenosine A1 receptor; antisense oligonucleotide; hypoxia;
 KW adenosine A2a receptor; adenosine A2b receptor; adenosine A3 receptor;
 KW phosphorothioate; cardiopulmonary failure; renal failure; ischaemia;
 KW endotoxin release; ARDS; acute respiratory distress syndrome;
 KW cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic;
 KW supraventricular tachycardia; allergic rhinitis; acute inflammation;
 KW chronic obstructive pulmonary disease; ss.
 XX
 XX Homo sapiens.
 OS Synthetic.
 OS
 XX WO963938-A2.
 PN
 PD 16-DEC-1999.
 XX
 XX 08-JUN-1999; 99WO-US012775.
 PF
 XX 08-JUN-1998; 98US-0088501P.
 PR 09-JUN-1998; 98US-00093972.
 PR 09-JUN-1998; 98US-0088657P.
 XX
 XX (EPIC-) EPIGENESIS PHARM INC.
 PA
 XX
 XX Nyce JW, Hill JL;
 PI
 XX WPI; 2000-116433/10.
 DR
 XX Novel composition for treating or preventing e.g. cardiopulmonary and
 PT renal injury.
 PT
 XX
 PS Example 6; Page 52; 252pp; English.
 XX
 CC The present invention describes a pharmaceutical composition, comprising
 CC at least one agent (I) that prevents, alleviates and/or inhibits
 CC adenosine-mediated cardiopulmonary and/or renal damage and/or failure.
 CC (I) is an adenosine A2a receptor agonist (Ia), or an oligonucleotide
 CC (Ib), containing less than 15% adenosine (A), that is antisense to target
 CC genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3'
 CC ends or segments between coding and non-coding sequences), or to all
 CC segments of mRNA encoding the adenosine A1, A2a, A2b or A3 receptors, and
 CC has A1, A2b or A3 agonist activity or A2a antagonist activity (or at
 CC least no agonist activity at this receptor). (I) may be a mixture of (Ia)
 CC and (Ib), and optionally also contains one or more surfactants. The
 CC compositions are used to prevent, alleviate and/or treat adenosine
 CC receptor-mediated cardiac, lung and/or renal damage or failure
 CC (particularly where associated with ischaemia, toxin release and/or
 CC administration of drugs or imaging agents, e.g. adenosine for treating
 CC supraventricular tachycardia); (adult) respiratory distress syndrome
 CC (e.g. associated with sepsis); allergic rhinitis; chronic obstructive
 CC pulmonary disease; cardiopulmonary hypoxia associated with administration
 CC of stress-test agents, particularly where such conditions are associated
 CC with acute inflammation. AAA02717, AAA02719, AAA02721 and AAA02723 to
 CC AAA03715 represent specifically claimed phosphorothioate antisense
 CC oligonucleotides for use in the composition of the present invention.
 CC AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other
 CC phosphorothioate oligonucleotides used in the exemplification of the
 CC present invention
 XX
 SQ Sequence 21 BP; 1 A; 9 C; 11 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1180 CGGGCCCGGCTGACCCGTG 1197
 Db |||||
 20 CGGGCCCGGCTGCGCCGG 3

RESULT 1754
 AAF18443/C

ID AAF18443 standard; DNA; 21 BP.
 XX AC
 XX AAF18443;
 DT
 XX 14-MAR-2001 (first entry)
 DE Human adenosine A2b receptor antisense oligonucleotide #10.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 XX Homo sapiens.
 OS
 XX WO200062736-A2.
 PN
 XX 26-OCT-2000.
 PD
 XX 24-MAR-2000; 2000WO-US008020.
 PF
 XX 06-APR-1999; 99US-0127958P.
 PR
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 XX Nyce JW;
 PI
 XX WPI; 2000-679539/66.
 DR
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 PT
 XX Claim 14; Page 306; 1592pp; English.
 PS
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulin and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 21 BP; 1 A; 9 C; 11 G; 0 T; 0 U; 0 Other;

| | | |
|--------------------------|---|--|
| Query Match . | 0.4%; Score 14.8; DB 1; Length 21; | |
| Best Local Similarity | 88.9%; Pred. No. 1.8e+03; | |
| Matches 16; Conservative | 0; Mismatches 2; Indels 0; Gaps 0; | |
| QY | 1180 CGGGCCCGGCTGACCCCTG 1197 | |
| DB | 20 CGGGCCCGGCTGACCCCGG 3 | |
| RESULT 1755 | | |
| AAZ51371/c | | |
| ID AAZ51371 | standard; DNA; 21 BP. | |
| XX AC AAZ51371; | | |
| XX XX | | |
| DT 06-JUN-2000 | (first entry) | |
| DE | | |
| XX | Primer P2 to amplify A. thaliana chloroplast targeting transit peptide. | |
| XX | Chloroplast targetted beta-amylase; ct beta-amylase; promoter; | |
| KW | chromosome 4; starch metabolism; plastid; herbicide resistance; | |
| KW | pest resistance; syrup; alcohol; paper making; pharmaceutical; glue; | |
| KW | textile; dairy product; chloroplast targetting transit peptide; | |
| KW | PCR primer; ss. | |
| XX | | |
| XX | Arabidopsis thaliana. | |
| OS | | |
| XX | WO200011144-A2. | |
| PN | | |
| XX | | |
| PD | 02-MAR-2000. | |
| XX | | |
| PF | 13-AUG-1999; 99WO-GB002697. | |
| XX | | |
| PR | 19-AUG-1998; 98GB-00017959. | |
| PR | 19-AUG-1998; 98GB-00017963. | |
| PR | 05-JUN-1999; 99GB-00013014. | |
| XX | | |
| XX | (ADTE-) ADVANCED TECHNOLOGIES CAMBRIDGE. | |
| PA | | |
| XX | | |
| PI | Kavanagh TA, Lao NT; | |
| XX | | |
| XX | WPI; 2000-237643/20. | |
| DR | | |
| XX | | |
| PT | Novel beta-amylase genes, useful for regulating starch in transgenic | |
| PT | plants, has a chloroplast targeting sequence and new promoter sequence | |
| PT | useful for the control of transgenic gene expression. | |
| XX | | |
| PS | Example 3; Page 34; 74pp; English. | |
| XX | | |
| CC | The patent discloses Arabidopsis thaliana chloroplast targetted beta- | |
| CC | amylase (ct beta-amylase) gene and a light or sugar inducible promoter | |
| CC | sequence located on chromosome 4. Transgene comprising ct beta-amylase | |
| CC | gene and the promoter sequence may be used to transform plants to alter | |
| CC | the activity of starch biosynthesis or degradation pathway enzymes, | |
| CC | target proteins or enzymes to plant plastids, alter seed set and impart | |
| CC | herbicide or pest resistance. Manipulation of the amount of starch in | |
| CC | plastids of leaves or storage organs, finds use in tobacco, potato crisp | |
| CC | industry and others involving malting of grain, production of syrups and | |
| CC | alcohol, paper making, pharmaceuticals, glue, oil, textiles and dairy | |
| CC | products. The present sequence is the PCR primer P2, used for | |
| CC | amplification of cDNA encoding A. thaliana chloroplast targetting transit | |
| CC | peptide from ct beta-amylase gene located in cosmid AAG16599 | |
| XX | | |
| SQ | Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other; | |
| Query Match | 0.4%; Score 14.8; DB 1; Length 21; | |
| Best Local Similarity | 88.9%; Pred. No. 1.8e+03; | |
| Matches 16; Conservative | 0; Mismatches 2; Indels 0; Gaps 0; | |
| QY | 2213 AACAAATGTCAGGGGTCCTC 2230 | |
| DB | 19 AACAAATGTCAGGGGTCCTC 2 | |

PA (AFFY-) AFFYMETRIX INC.
 XX Fan J, Hirschhorn JN, Huang X, Kaplan P, Lander ES, Lockhart DJ;
 PI Ryder T, Sklar P;
 XX WPI; 2000-656171/63.
 DR Universal array of oligonucleotides tags attached to a solid substrate
 XX along with locus-specific tagged oligonucleotides useful in genotyping
 PT using single base extension reactions.
 XX Example 7; Page 50; 70pp; English.
 PS The present invention relates to an oligonucleotide array comprising
 XX oligonucleotide tags fixed to a solid substrate. The oligonucleotide
 CC array is useful for genotyping a nucleic acid sample at one or more loci
 CC via single base extension (SBE) reactions. A pair of primers is used to
 CC amplify a polymorphic locus in a sample e.g. a single nucleotide
 CC polymorphism (SNP). The present sequence is one such polymorphic locus
 CC used in the present invention. The amplified nucleic acid product is then
 CC used as a template in a SBE reaction with an extension primer. The SBE
 CC reaction products are used to form the oligonucleotide array. Note: This
 CC sequence includes a SNP represented by the degenerate codon in the
 CC sequence
 XX Sequence 21 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 1 Other;
 SQ Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 80.0%; Pred. No. 1.8e+03;
 Matches 16; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 QY 2121 CTCAGGGGACGACTCCGTGT 2140
 DB 1 CTCAGAGGACRACCCGAGT 20
 RESULT 1760
 AAF95405
 ID AAF95405 standard; DNA; 21 BP.
 XX AAF95405;
 AC AAF95405;
 XX 06-JUN-2001 (first entry)
 DT Human gene single nucleotide polymorphism #166.
 DE Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
 KW polymorphism; vascular disease; coronary artery disease; forensics;
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
 KW pulmonary embolism; paternity test; ds.
 XX Homo sapiens.
 OS Key Location/Qualifiers
 FH Variation replace(11,T)
 FT /*tag= a
 FT /standard_name= "single nucleotide polymorphism"
 XX WO200118250-A2.
 PN 15-MAR-2001.
 PD 07-SEP-2000; 2000WO-US024503.
 PF 10-SEP-1999; 99US-0153357P.
 PR 26-JUL-2000; 2000US-0220947P.
 PR 16-AUG-2000; 2000US-0225724P.
 XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA (MILL-) MILLENNIUM PHARM INC.
 XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
 PI WPI; 2001-226749/23.
 DR Nucleic acids comprising single nucleotide polymorphisms, useful in
 PT applications such as forensics, paternity testing, medicine, genetic
 applications such as diabetes and
 PT atherosclerosis.
 XX Example; Page 59; 242pp; English.
 PS The present invention provides a method of diagnosing a vascular disease
 CC in an individual, involving determining the sequence at various
 CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
 CC genes. The sequences at a number of polymorphic sites are also provided
 CC in the specification. In particular, the method can be used in the
 CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
 CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
 CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
 CC useful in forensics, paternity testing, genetic analysis and phenotype
 CC correlations to diseases. The present sequence is an example of one of
 CC the human gene SNPs shown in the specification
 XX Sequence 21 BP; 4 A; 7 C; 8 G; 2 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2088 CCCGGTGGCCAGGACAC 2105
 DB 3 CCTGGCTGGCCAGGACAC 20
 RESULT 1761
 AAF95761/C
 ID AAF95761 standard; DNA; 21 BP.
 XX AAF95761;
 AC AAF95761;
 XX 06-JUN-2001 (first entry)
 DT Human gene single nucleotide polymorphism #522.
 DE Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
 KW polymorphism; vascular disease; coronary artery disease; forensics;
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
 KW pulmonary embolism; paternity test; ds.
 XX Homo sapiens.
 OS Key Location/Qualifiers
 FH Variation replace(11,C)
 FT /*tag= a
 FT /standard_name= "single nucleotide polymorphism"
 XX WO200118250-A2.
 PN 15-MAR-2001.
 PD 07-SEP-2000; 2000WO-US024503.
 PF 10-SEP-1999; 99US-0153357P.
 PR 26-JUL-2000; 2000US-0220947P.
 PR 16-AUG-2000; 2000US-0225724P.
 XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA (MILL-) MILLENNIUM PHARM INC.
 XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
 PI WPI; 2001-226749/23.
 DR Nucleic acids comprising single nucleotide polymorphisms, useful in
 PT applications such as forensics, paternity testing, medicine, genetic

PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis.
XX
XX Example; Page 84; 242pp; English.
XX
CC The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPs shown in the specification
XX
XX Sequence 21 BP; 4 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
SQ

Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. NO. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1309 GACGATGCCACTGCACAG 1326
|| ||||| |||||
DB 20 GAGGATGCCACTGCACAG 3

RESULT 1762
AAF92947
ID AAF92947 standard; DNA; 21 BP.
XX
XX AAF92947;
AC
XX
XX
DT 17-MAY-2001 (first entry)
XX
DE Wild type sequence for ABC1 polymorphic site #18.
XX
XX High density lipoprotein-cholesterol; HDL-C; cardiovascular; ABC1; ds.
XX
XX Homo sapiens.
XX
XX WO200115676-A2.
PN
XX
XX 08-MAR-2001.
XX
XX 01-SEP-2000; 2000WO-IB001492.
PF
XX
XX 01-SEP-1999; 99US-0151977P.
PR
XX 15-MAR-2000; 2000US-00526193.
PR
XX 23-JUN-2000; 2000US-0213958P.
XX
XX (UYBR-) UNIV BRITISH COLUMBIA.
PA (XENO-) XENON GENETICS INC.
XX
XX
XX Hayden MR, Brooks-Wilson AR, Pimstone SN, Clee SM;
XX
XX WPI; 2001-244356/25.
XX
XX
XX Treating a lower than normal high density lipoprotein-cholesterol (HDL-C)
PT level, a higher than normal triglyceride level, or a cardiovascular
PT disease, by administering a compound that modulates LXR- or RXR-mediated
PT transcriptional activity.
XX
XX Disclosure; Fig 4; 317pp; English.
PS
XX
XX The present invention relates to a method for treating a patient
CC diagnosed as having a lower than normal high density lipoprotein-
CC cholesterol (HDL-C) level, a higher than normal triglyceride level, or a
CC cardiovascular disease, involving administering a compound that modulates
CC LXR- or RXR-mediated transcriptional activity or ABC1 expression or
CC activity. The LXR gene product may be used in an assay to identify
CC compounds useful for the treatment of a disease or condition selected
CC

```

RESULT 1764
AAD27707
ID AAD27707 standard; DNA; 21 BP.
XX
AC AAD27707;
XX
DT 18-APR-2002 (first entry)
XX
DE Mouse Skp2 promoter E2F second region binding site mutant #1.
XX
KW Mouse; Skp2 promoter; cytosolic; therapy; tumour; cancer; head; neck;
KW lung; stomach; colon; rectum; uterine; cervix; mutant; ds.
XX
OS Mus sp.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT mutation replace(7, G)
FT mutation /*tag= a
FT mutation replace(14, G)
FT mutation /*tag= b
FT mutation replace(17, G)
FT mutation /*tag= c
XX
PN WO200198511-A1.
XX
XX 27-DEC-2001.
XX
XX 21-JUN-2001; 2001WO-EP007038.
XX
XX 23-JUN-2000; 2000GB-00015371.
XX
XX (NOVS ) NOVARTIS FORSCHUNGSSTIFTUNG ZWEIGNIEDERL.
XX
XX Gallani A, Imbert G, Krek W;
XX
XX WPI; 2002-139792/18.
XX
XX New polynucleotide comprising an Skp 2 promoter sequence, useful as a
XX pharmaceutical and in manufacturing a medicament for the treatment of
XX cancer such as cancers of the breast, head, neck, lung stomach, colon,
XX rectum, or uterine cervix.
XX
XX Example 3; Page 25; 66pp; English.
XX
XX The invention relates to a polynucleotide comprising an Skp 2 promoter
XX sequence. The polynucleotide or a plasmid of vector comprising the
XX polynucleotide is useful as a pharmaceutical, and in manufacturing a
XX medicament for the treatment of cancer such as cancers of the breast,
XX head or neck, lung, stomach, colon, rectum, or uterine cervix. The
XX promoter is useful in tumour and cancer therapy to kill or reduce the
XX growth, division or viability of tumour or cancer cells. The present
XX sequence is a mutant of mouse Skp2 promoter E2F second region binding
XX site
XX
XX Sequence 21 BP; 5 A; 10 C; 4 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.8; DB 1; Length 21;
XX Best Local Similarity 88.9%; Pred. No. 1.8e+03;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
OY 2700 TCCACCCCTGCCCTCAG 2717
DB 3 TCCACCCCGCACCTCAG 20
XX
RESULT 1765
ABK65417/c
ID ABK65417 standard; DNA; 21 BP.
XX
AC ABK65417;
XX
DT 02-JUL-2002 (first entry)

```

```

XX
DE Human single nucleotide polymorphism #37.
XX
KW Human; single nucleotide polymorphism; SNP; sickle cell anaemia;
KW agammaglobulinaemia; diabetes insipidus; Lesch-Nyhan syndrome;
KW muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease;
KW familial hypercholesterolaemia; polycystic kidney disease; cancer;
KW hereditary spherocytosis; Von Willebrand's disease; tuberous sclerosis;
KW Ehlers-Danlos syndrome; osteogenesis imperfecta; familial colonic polyposis;
KW acute intermittent porphyria; inflammation; nervous system disorder;
KW infection; rheumatoid arthritis; multiple sclerosis; diabetes;
KW systemic lupus erythematosus; Graves disease; longevity; obesity;
KW baldness; fertility; forensic; paternity testing; ss.
XX
OS Homo sapiens.
XX
XX US2002037508-A1.
XX
XX 28-MAR-2002.
XX
XX 18-JAN-2001; 2001US-00765081.
XX
XX 19-JAN-2000; 2000US-0176861P.
XX
XX (CARG/) CARGILL M.
XX (IREL/) IRELAND J S.
XX (LAND/) LANDER E S.
XX
XX Cargill M, Ireland JS, Lander ES;
XX
XX WPI; 2002-315108/35.
XX
XX Nucleic acid comprising single nucleotide polymorphisms, useful in
XX forensics, paternity testing and diagnosis of disease.
XX
XX Claim 1; Page 39; 96pp; English.
XX
XX The invention relates to a nucleic acid comprising single nucleotide
XX polymorphisms (SNPs) associated with diseases. The nucleic acids
XX comprising the SNPs and probes and primers for detecting them may be used
XX in assays for the diagnosis of diseases associated with SNPs (such as
XX sickle cell anaemia, agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan
XX syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,
XX familial hypercholesterolaemia, polycystic kidney disease, hereditary
XX spherocytosis, Von Willebrand's disease, tuberous sclerosis, Ehlers-Danlos
XX haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
XX syndrome, osteogenesis imperfecta, and acute intermittent porphyria,
XX symptoms of, or susceptibility to, multifactorial diseases of which a
XX component is or may be genetic, such as autoimmune diseases,
XX inflammation, cancer, diseases of the nervous system, and infection by
XX pathogenic microorganisms, autoimmune diseases including rheumatoid
XX arthritis, multiple sclerosis, diabetes (insulin-dependent and non-
XX independent), systemic lupus erythematosus and Graves disease, cancers
XX including cancers of the bladder, brain, breast, colon, oesophagus,
XX kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,
XX skin, stomach and uterus, longevity, appearance (e.g., baldness,
XX obesity), strength, speed, endurance, fertility, and susceptibility or
XX receptivity to particular drugs or therapeutic treatments), in forensics
XX and in paternity testing. ABK65381-ABK65841 represent human single
XX nucleotide polymorphisms of the invention
XX
XX Sequence 21 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 1 Other;

```

```

Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 839 TGGTCTGTCGACCCGAGG 856
DB 19 TGGTCTGTCGACCCGAGG 2

```


PI Brinkmann U, Hoffmeyer S, Mornhinweg E;
 XX WPI; 2002-657475/70.
 XX Novel multidrug resistance-associated protein 1 polynucleotide useful for
 PT diagnosis and treatment of cancer and multidrug resistance related
 PT diseases, and for identifying single nucleotide polymorphisms.
 XX
 XX Example 2; Page 78; 198pp; English.
 XX The invention relates to a multidrug resistance-associated protein 1 (MRP
 CC -1) polynucleotide. The polynucleotide is useful in an in vitro method
 CC for identifying a single nucleotide polymorphism and for identifying and
 CC obtaining a pro-drug or drug capable of modulating the activity of a
 CC molecular variant of MRP-1 or for identifying and obtaining an inhibitor
 CC of the activity of a molecular variant of MRP-1. The sequences are useful
 CC for diagnosing a disorder related to the presence of a molecular variant
 CC of MRP-1 or susceptibility to such a disorder, where the disorder is
 CC cancer (particularly renal cancer) or a disease related to multidrug
 CC resistance. This sequence represents a human MRP-1 polymorphic DNA region
 XX
 XX Sequence 21 BP; 8 A; 4 C; 1 G; 8 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2791 TACATTTCTATAAATAGA 2808
 DB 2 TCCATTTCTATAAATAGA 19
 RESULT 1771
 ABN89299/c
 ID ABN89299 standard; DNA; 21 BP.
 XX
 AC ABN89299;
 XX
 DT 29-AUG-2002 (first entry)
 XX
 DE Human adenylate cyclase type IV PCR primer SEQ ID NO:3.
 XX Human; adenylate cyclase type IV; enzyme; hypotensive; osteopathic;
 KW antitanginal; cardiac; vasotropic; antiatherosclerotic; vulnerary;
 KW cerebroprotective; antiulcer; antiaesthetic; antiallergic; antimigraine;
 KW neurologic; tranquilizer; neuroleptic; antianemic; antidepressant; stroke;
 KW antiemetic; gene therapy; hypertension; urinary retention; osteoporosis;
 KW angina pectoris; myocardial infarction; restenosis; atherosclerosis;
 KW aneurysm; wound healing; ischaemia; ulcer; asthma; allergy; migraine;
 KW vomiting; benign prostatic hypertrophy; psychotic; neurological disorder;
 KW degenerative disease; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200233100-A2.
 XX
 PD 25-APR-2002.
 XX
 PF 17-OCT-2001; 2001WO-EP012002.
 XX
 PR 18-OCT-2000; 2000US-0241306P.
 XX
 PA (PARB) BAYER AG.
 XX
 PI Floeckner J, Liu N;
 XX
 XX WPI; 2002-507943/54.
 DR Novel human adenylate cyclase type IV protein, regulators of which are
 PT useful for treating and preventing atherosclerosis, hypertension,
 PT osteoporosis, ulcer, asthma, allergy, psychotic and neurological
 PT disorders.
 XX
 PS Example 1; Fig 3A; 35pp; English.
 XX The invention relates to a new method for the synthesis of target-
 CC

PS Example 2; Page 53; 95pp; English.
 XX The present invention describes human adenylate cyclase type IV (I). (I)
 CC has hypotensive, osteopathic, antitanginal, cardiac, vasotropic,
 CC antiatherosclerotic, vulnerary, cerebroprotective, antiulcer,
 CC antiaesthetic, antiallergic, antimigraine, neurologic, tranquilizer,
 CC neuroleptic, antianemic, antidepressant and antiemetic activities and can
 CC be used in gene therapy. (I) can be used in the treatment of an adenylate
 CC cyclase type IV dysfunction related disease, in particular hypertension,
 CC urinary retention, osteoporosis, angina pectoris, myocardial infarction,
 CC restenosis, atherosclerosis, a disease characterised by excessive smooth
 CC muscle cells or reduced smooth muscle cell proliferation, aneurysms,
 CC wound healing, stroke, ischaemia, ulcer, asthma, allergy, benign
 CC prostatic hypertrophy, migraine, vomiting, psychotic, neurological
 CC disorder, including anxiety, schizophrenia, manic depression, depression,
 CC delirium, dementia, severe mental retardation and degenerative diseases.
 CC The present sequence represents a PCR primer for amplifying the adenylate
 CC cyclase type IV gene from a human endothelial cell cDNA library in an
 CC example from the present invention
 XX
 XX Sequence 21 BP; 2 A; 11 C; 4 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 868 GAGGCTGACGAGCGCGGC 885
 DB 21 GGGGCTGAAGAGCGCGGC 4
 RESULT 1772
 ACC78430
 ID ACC78430 standard; RNA; 21 BP.
 XX
 AC ACC78430;
 XX
 DT 18-AUG-2003 (first entry)
 XX
 DE EGFP target-specific siRNA 2.
 XX Nucleic acid synthesis; small interfering RNA; siRNA; RNA polymerase;
 KW promoter; T7; transcription; EGFP; green fluorescent protein; ds.
 XX
 OS Synthetic.
 XX Key Location/Qualifiers
 FH misc_feature 1..2
 FT /note= "the 3' end of the complementary strand overhangs
 FT the 5' end of this strand by the sequence 5'-UU-3'."
 FT
 XX
 PN WO2003040294-A2.
 XX
 PD 15-MAY-2003.
 XX
 PF 30-OCT-2002; 2002WO-EP012165.
 XX
 PR 05-NOV-2001; 2001US-0337975P.
 XX
 PA (JANC) JANSSEN PHARM NV. I
 XX
 PI De Backer MD, Harris AN;
 XX
 DR WPI; 2003-430657/40.
 XX
 XX New method for the synthesis of target-specific short double stranded
 PT RNAs by hybridizing the sense oligonucleotide product with the
 PT complementary antisense oligonucleotide product.
 XX
 PS Example 1; Fig 3A; 35pp; English.
 XX The invention relates to a new method for the synthesis of target-
 CC

CC specific short double stranded (ds) RNAs. The method involves: (a)
 CC combining a target-specific sense or antisense oligonucleotide template
 CC and a chain extending enzyme in a reaction mixture so that the template
 CC extended sense or antisense oligonucleotide product is formed; and (b)
 CC hybridizing the sense oligonucleotide product with the complementary
 CC antisense oligonucleotide product. The target-specific ds RNAs are
 CC useful in RNA interference in vertebrate and invertebrate systems as
 CC small interfering RNAs (siRNAs). The method provides truncated RNA
 CC polymerase promoter sequences, where the substitutions do no affect the
 CC in vitro transcription yields, but increase the possibility that at least
 CC one target-specific sequence of a defined sequence length exists in the
 CC mRNA of the target protein. Sequences ACC78430-431 represent EGFP target-
 CC specific ds siRNAs used in a FACS analysis of EGFP-transfected HeLa cells
 XX
 SQ Sequence 21 BP; 3 A; 5 C; 8 G; 0 T; 5 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 72.2%; Pred. No. 1.8e+03;
 Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 1530 CGAGGACGAGCTCACCTT 1547
 ||||| :|||:
 Db 4 CGAGGACGUCACCUU 21

RESULT 1773
 ADA15942/c
 ID ADA15942 standard; DNA; 21 BP.
 XX
 AC ADA15942;
 XX
 DT 06-NOV-2003 (first entry)
 XX
 DE Synthetic storage protein oligonucleotide SM91.
 XX
 KW ss: lysC; transgenic; lysine accumulation;
 KW dihydrodipicolinic acid synthase; DHDPs; lysine inhibition;
 KW lysine ketoglutarate reductase; LKR; chloroplast transit sequence; CTS;
 KW aspartokinase III; AKIII; synthetic seed storage protein; SSP.
 XX
 OS Synthetic.
 XX
 PN US6459019-B1.
 XX
 PD 01-OCT-2002.
 XX
 PF 24-MAR-1997; 97US-00823771.
 XX
 PR 19-MAR-1992; 92US-00855414.
 PR 06-JAN-1994; 94US-00178212.
 PR 07-JUN-1995; 95US-00474633.
 XX
 PA (DUPO) DU PONT DE NEMOURS & CO E I.
 XX
 PI Falco SC, Keeler SJ, Rice JA;
 XX
 DR WPI; 2003-028272/02.
 XX

PT Transformed plants that accumulate lysine at higher levels in its seeds
 PT than untransformed plants, has gene fragments encoding lysine-insensitive
 PT dihydrodipicolinic acid synthase and lysine ketoglutarate reductase.
 XX
 PS Example 21; Col 79; 109pp; English.
 XX
 CC The invention relates to a plant comprising two foreign nucleotide
 CC sequences which cause seeds obtained from the plant to accumulate lysine
 CC at a level of at least 10% higher than seeds of a plant that do not
 CC comprise the nucleotide, where the nucleotide comprises a fragment
 CC encoding a dihydrodipicolinic acid synthase (DHDPs) that is insensitive
 CC to lysine inhibition, and a fragment encoding a plant lysine
 CC ketoglutarate reductase (LKR) or its subfragment. The nucleotide fragment
 CC is operably linked to a plant chloroplast transit sequence (CTS) and the
 CC plant lysine ketoglutarate reductase subfragment is used in antisense

CC inhibition or cosuppression. Also included are progeny plants from the
 CC above mentioned plant and seeds obtained from the above mentioned plant.
 CC The seeds obtained from the above mentioned plant (e.g., rapeseed,
 CC soybean or corn) comprising the foreign nucleic acid sequences accumulate
 CC lysine at a higher level, preferably at a level of at least 10% higher
 CC than seeds of a plant that do not comprise the foreign nucleic acid
 CC sequences. Chimaeric gene comprising DHDPs from C. glutamicum and
 CC aspartokinase III (from the lysC gene) of E. coli (mutated to be lysine-
 CC insensitive) are also used to generate the above transgenic plants. Also
 CC disclosed are synthetic seed storage proteins (SSP) used as an internal
 CC source of lysine, built up from synthetic peptide monomers based around
 CC an EarI site sequence (for generating multimeric proteins). The present
 CC sequence is a strand of an oligonucleotide encoding an SSP monomer.

SQ Sequence 21 BP; 2 A; 9 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1353 CGAGATGATGAAGATGAT 1370
 ||||| :|||:
 Db 18 CGAGAAGATGAAGAAGAT 1

RESULT 1774
 ACH03698/c
 ID ACH03698 standard; DNA; 21 BP.
 XX
 AC ACH03698;
 XX
 DT 25-SEP-2003 (first entry)
 XX
 DE Ear I-based lysine-rich heptad repeat oligonucleotide SM91.
 XX
 KW Aspartokinase; AKIII; dihydrodipicolinic acid synthase; DHDPs;
 KW seed lysine content; seed threonine content; seed storage protein; SSP;
 KW chloroplast transit sequence; lysine-rich protein;
 KW lysine ketoglutarate reductase; LKR; transgenic; ss.
 XX
 OS Synthetic.
 XX
 PN US2003056242-A1.
 XX
 PD 20-MAR-2003.
 XX
 PF 17-DEC-2001; 2001US-00023066.
 XX
 PR 19-MAR-1992; 92US-00855414.
 PR 18-MAR-1993; 93WO-US002480.
 PR 06-JAN-1994; 94US-00178212.
 PR 07-JUN-1995; 95US-00474633.
 PR 24-MAR-1997; 97US-00823771.
 XX
 PA (FALC/) FALCO S C.
 XX
 PI Falco SC;
 XX
 DR WPI; 2003-521869/49.
 XX

PT New nucleic acid fragment encoding aspartokinase and dihydrodipicolinic
 PT acid synthase, useful for increasing threonine or lysine content of seeds
 PT of plant.
 XX
 PS Example 21; Page 43; 116pp; English.
 XX
 CC The invention relates to an isolated nucleic acid fragment comprising a
 CC first nucleic acid subfragment encoding aspartokinase (AK) that is
 CC substantially insensitive to inhibition by lysine, and a second nucleic
 CC acid subfragment encoding dihydrodipicolinic acid synthase (DHDPs) that
 CC is substantially insensitive to inhibition by lysine. Also included are
 CC an isolated nucleic acid fragment comprising a nucleic acid subfragment
 CC encoding lysine ketoglutarate reductase (LKR), a chimaeric gene (where

QY 1522 AAGCCGCCGAGGAGCAG 1539
 Db 18 AAGCCGCCGAGGAGCAG 1

RESULT 1777
 ABZ94137/c
 ID ABZ94137 standard; DNA; 21 BP.
 XX
 AC ABZ94137;
 DT 17-OCT-2003 (first entry)
 XX
 DE Human phosphorothioate antisense fragment.

KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiasthmatic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; db.

OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.

PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIC-) EPGENESIS PHARM INC.

XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiqunone.

PS Disclosure; SEQ ID NO 9379; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiqunone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, antiallergic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiqunone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 21 BP; 1 A; 9 C; 11 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1180 CGGGCCCGCTGACCCGTG 1197
 Db 20 CGGGCCCGCTGCGCCGG 3

RESULT 1778
 AAD47326/c
 ID AAD47326 standard; DNA; 21 BP.
 XX
 AC AAD47326;
 DT 24-FEB-2003 (first entry)
 XX
 DE Human RT-PCR forward primer for mouse ngn3 DNA isolation.

KW Human; insulin-secreting cell; neurogenin 3; ngn3; precursor stem cell;
 KW pancreatic exocrine cell; transplantation; RT-PCR; primer; ss.

OS Homo sapiens.
 XX
 PN WO200274946-A2.

XX 26-SEP-2002.

XX 26-FEB-2002; 2002WO-DK000130.

XX 26-FEB-2001; 2001US-0271474P.

XX (NOVO) NOVO NORDISK AS.

XX Serup P, Heimberg H, Gradwohl G;

XX WPI; 2003-018804/01.

XX Generating insulin-secreting cells from precursor stem cells or adult
 PT pancreatic exocrine cells, for generating glucose sensitive insulin
 PT secreting beta cells for transplantation, comprises using neurogenin3 or
 PT NeuroD/beta2.

XX Example 5B; Page 37; 66pp; English.

XX The invention relates to a method for generating insulin-secreting cells
 CC from precursor stem cells or adult pancreatic exocrine cells. The method
 CC comprises exposing the precursor cells or exocrine cells to: a nucleic
 CC acid molecule encoding neurogenin 3 (ngn3) or NeuroD/beta2; or an
 CC activator of ngn3 or NeuroD/beta2 gene expression, under conditions
 CC effective to generate the insulin-generating cells from the precursor or
 CC exocrine cells. The invention is useful in generating insulin-secreting
 CC cells from precursor stem cells or adult pancreatic exocrine cells is
 CC useful for generating glucose sensitive insulin secreting beta cells
 CC suitable for transplantation, and for in situ development of insulin-
 CC secreting cells in a patient. The method is also useful for preventing
 CC premature differentiation of precursor stem cells into insulin-secreting
 CC beta cells and for identifying compounds that prevent or activate beta
 CC cell differentiation. The present sequence is human RT-PCR primer for
 CC isolation of mouse ngn3 DNA

XX Sequence 21 BP; 7 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 472 AAGTTGGCAGCATCCGG 489
 Db 18 AAGTTGGCAGCATCCGG 1

RESULT 1779

ABD32529/c

ID ABD32529 standard; DNA; 21 BP.

XX

AC ABD32529;
XX 29-JUL-2004 (first entry)
XX A1/A3 antisense receptor-associated oligonucleotide SEQ ID 9379.
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX Homo sapiens.
XX WO200285309-A2.
XX 31-OCT-2002.
XX 23-APR-2002; 2002WO-US013143.
XX 24-APR-2001; 2001US-0286036P.
XX (EPIG-) EPIGENESIS PHARM INC.
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Example 6; SEQ ID NO 9379; 763bp; English.
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 21 BP; 1 A; 9 C; 11 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;

Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 CGGGCCCGGCTGACCTG 1197
DB 20 CGGGCCCGGCTGGCCGG 3
RESULT 1780
ADP19689
ID ADP19689 standard; DNA; 21 BP.
XX ADP19689;
AC ADP19689;
XX 12-AUG-2004 (first entry)
XX Periodontal ligament fibroblast gene PDLs cDNA primer #2.
DE Periodontal ligament fibroblast; PDLs5; PDLs17; PDLs22; PDLs25;
KW PDLs31; primer.
XX Homo sapiens.
XX KR2002078533-A.
XX 19-OCT-2002.
XX 04-APR-2001; 2001KR-00017905.
XX 04-APR-2001; 2001KR-00017905.
XX (PARK/) PARK J C.
XX Han GY, Kim HJ, Lee JH, Park JC;
XX WPI; 2003-338954/32.
XX Novel polypeptide pdlsl7 specific to periodontal ligament fibroblast and
PT the use thereof.
XX Disclosure; SEQ ID NO 13; 31pp; Korean.
XX The invention relates to a novel PDLsl7 polypeptide which is specific to
CC periodontal ligament fibroblast and its use for detection of periodontal
CC ligament fibroblast, mass-isolation of PDLsl7 protein, and production of
CC an antibody specific to the PDLsl7. The specification also discloses a
CC polypeptide encoded by an mRNA is selected from the group consisting of
CC PDLs5, PDLsl7, PDLs22, PDLs25 and PDLs31 which are selectively expressed
CC in periodontal ligament fibroblast and a biological probe selected from
CC cDNAs of PDLs 5, 17, 22, 25 and 31. An antigenic peptide for PDLsl7 is
CC selected from the peptides disclosed in the specification. An antibody
CC capable of binding the PDLsl7 polypeptide is prepared by administering
CC the PDLsl7 peptide into an animal. This sequence corresponds to a PCR
CC primer to amplify a PDLs cDNA sequence.
XX
SQ Sequence 21 BP; 9 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3568 ACCTTTCAAAGCTTGGAG 3585
DB 1 ACCTTTCAAACATGGAG 18
RESULT 1781
ADK98157/c
ID ADK98157 standard; DNA; 21 BP.
XX ADK98157;
AC ADK98157;
XX 06-MAY-2004 (first entry)

PR 17-SEP-2002; 2002US-0410959P.
PR 17-SEP-2002; 2002US-0410960P.
PR 17-SEP-2002; 2002US-0410961P.
PR 17-SEP-2002; 2002US-0410962P.
PR 17-SEP-2002; 2002US-0411019P.
PR 17-SEP-2002; 2002US-0411022P.
PR 17-SEP-2002; 2002US-0411023P.
PR 17-SEP-2002; 2002US-0411024P.
PR 17-SEP-2002; 2002US-0411025P.
PR 17-SEP-2002; 2002US-0411032P.
PR 17-SEP-2002; 2002US-0411035P.
PR 17-SEP-2002; 2002US-0411037P.
PR 17-SEP-2002; 2002US-0411041P.
PR 17-SEP-2002; 2002US-0411045P.
PR 17-SEP-2002; 2002US-0411046P.
PR 17-SEP-2002; 2002US-0411048P.
PR 17-SEP-2002; 2002US-0411052P.
PR 17-SEP-2002; 2002US-0411055P.
PR 17-SEP-2002; 2002US-0411073P.
PR 17-SEP-2002; 2002US-0411082P.
PR 17-SEP-2002; 2002US-0411101P.
PR 17-SEP-2002; 2002US-0411111P.
PR 18-APR-2003; 2003US-0463700P.
PR 18-APR-2003; 2003US-0463708P.
PR 18-APR-2003; 2003US-0463716P.
PR 18-APR-2003; 2003US-0463732P.
PR 02-MAY-2003; 2003US-0467199P.
PR 02-MAY-2003; 2003US-0467201P.
PR 02-MAY-2003; 2003US-0467203P.
PR 02-MAY-2003; 2003US-0467230P.
PR 19-MAY-2003; 2003US-0471306P.
PR 19-MAY-2003; 2003US-0471336P.
PR 22-MAY-2003; 2003US-0472420P.
PR 22-MAY-2003; 2003US-0472430P.
PR 09-JUN-2003; 2003US-0476609P.
PR 09-JUN-2003; 2003US-0476641P.
PR 08-JUL-2003; 2003US-0485218P.
PR 08-JUL-2003; 2003US-0485223P.
PR 08-JUL-2003; 2003US-0485224P.
PR 08-JUL-2003; 2003US-0485325P.
PR 14-JUL-2003; 2003US-0486446P.
PR 14-JUL-2003; 2003US-0486480P.
PR 15-JUL-2003; 2003US-0486891P.
PR 15-JUL-2003; 2003US-0486960P.
PR 08-AUG-2003; 2003US-0493341P.
PR 08-AUG-2003; 2003US-0493370P.
PR 08-AUG-2003; 2003US-0493573P.
PR 08-AUG-2003; 2003US-0493577P.
XX (FIVE-) FIVE PRIME THERAPEUTICS INC.
XX Williams LT, Chu K, Lee E, Hestir K, Beaurang PA, Behrens D;
PI Halenbeck RF, Huang MM, Kothakota S, Haishan L, Linnemann T;
PI Pierce K, Wang Y, Wong JGP, Wu G, Zhang H,
XX WPI; 2004-348438/32.
XX New nucleic acid molecule for diagnosing, preventing or treating diseases
PT such as proliferative (e.g. cancer), inflammatory, immune, metabolic,
PT genetic, bacterial and viral diseases.
PS Claim 1; SEQ ID NO 1192; 428pp; English.
XX The present invention relates to an isolated nucleic acid molecule
CC encoding a polypeptide which is believed to be cytostatic,
CC antiinflammatory, immunosuppressive, antibacterial and virucidal. The
CC composition and methods are useful for diagnosing, preventing and
CC treating diseases such as proliferative (e.g. cancer), inflammatory,
CC immune, metabolic, genetic, bacterial and viral diseases. The present
CC sequence represents a human secreted protein encoding sequence. The
CC present sequence is available on WIPWEB and is not in the specification.
XX Sequence 21 BP; 8 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1221 CTTGGCCAGGTGGTCAT 1238
Db 18 CTTGGCCAGGTGGTCCTT 1
RESULT 1784
ADP09242
ID ADP09242 standard; DNA; 21 BP.
XX
AC ADP09242;
XX
DT 26-AUG-2004 (first entry)
XX
DE Extend primer 37 used to genotype human chromogranin B polymorphism.
XX
KW breast cancer; cytostatic; gene therapy; human; chromogranin B; CHGB;
KW secretogranin 1; SCG1; chromosome 20pter-p12; ss; PCR; primer; SNP;
KW single nucleotide polymorphism.
XX
OS Homo sapiens.
XX WO2004047767-A2.
XX
PN 10-JUN-2004.
XX
PF 25-NOV-2003; 2003WO-US037966.
XX
PR 25-NOV-2002; 2002US-0429136P.
PR 24-JUL-2003; 2003US-0490234P.
XX (SEQU-) SEQUENOM INC.
XX
PI Roth RB, Nelson MR, Braun A, Kammerer SM, Reneland R;
XX WPI; 2004-441082/41.
XX
PT Identifying a subject at risk of breast cancer by detecting the presence
PT or absence of one or more nucleotide polymorphic variations, useful for
PT diagnosing, preventing and/or treating breast cancer.
XX Example 5; Page 102; 286pp; English.
XX The invention relates to a novel method for identifying a subject at risk
CC of breast cancer which comprises detecting the presence or absence of one
CC or more polymorphic variations associated with breast cancer in a nucleic
CC acid sample from a subject. The method of the invention has cytostatic
CC applications and may be useful for identifying a risk of breast cancer,
CC as well as therapeutic and prophylactic treatments that specifically
CC target breast cancer, such as gene therapy. The current sequence is that
CC of an Extend primer of the invention which was used to genotype single
CC nucleotide polymorphisms within human chromogranin B (CHGB;secretogranin
CC 1;SCG1) DNA which is located at chromosomal position 20pter-p12.
XX
XX Sequence 21 BP; 5 A; 3 C; 6 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2306 AGAGCTTTGGTCTGTGTG 2323
Db 4 AGAGCTTTTCATCTGTGTG 21
XX
RESULT 1785
ADP48125
ID ADP48125 standard; DNA; 21 BP.
XX
AC ADP48125;


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PF 20-APR-2000; 2000EP-00108643.
XX
XX 20-APR-1999; 99JP-00111601.
XX
XX (NIBI-) JAPAN BIOINDUSTRY ASSOC.
PA (AGEN ) AGENCY OF IND SCI & TECHNOLOGY.
PA (KANK-) KANKYO ENG CO LTD.
XX
XX Kurane R, Kanagawa T, Kamagata Y, Kurata S, Yamada K, Yokomaku T;
PI Koyama O, Furusho K;
XX WPI; 2000-657765/64.
XX
XX Determining the concentration of a target nucleic acid, useful e.g. for
PT detecting genetic mutations, comprises using a fluorescently labeled
PT probe in which emission is reduced by binding to the target nucleic acid.
XX
XX Example 5; Page 21; 55pp; English.
XX
XX The invention relates to the determination of the concentration of a
CC nucleic acid target, using a fluorescently labeled probe which produces
CC reduced fluorescence emission when hybridised to the target nucleic acid.
CC The method comprises measuring the reduction in emission caused by
CC hybridisation. The new method is particularly used to quantify target
CC nucleic acids by a real-time polymerase chain reaction, e.g. for
CC quantifying microbial cells in co-cultures or symbiotic systems, for
CC detecting gene mutations or polymorphisms, and for analysing melting
CC curves of target nucleic acids to determine a Tm value. Methods of the
CC invention allow target nucleic acids to be quantified quickly, easily and
CC accurately. Particularly there is no need to remove unbound probe, and no
CC materials are introduced that inhibit amplification by Taq polymerase (so
CC conventional PCR conditions can be used). The specificity of PCR is kept
CC high (amplification of primer dimers is delayed), and the limit of
CC quantitation is reduced. Complex probes are not needed, and amplification
CC can be monitored in real time. The working graph for data analysis
CC (automatically generated by a computer) has a higher correlation
CC coefficient than conventional graphs so more accurate quantitation is
CC possible. The current sequence represents a synthetic
CC deoxyribonucleotide that was used for investigating the base
CC selectivity of a target nucleic acid
XX
XX Sequence 30 BP; 4 A; 0 C; 1 G; 25 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 30;
Best Local Similarity 73.1%; Pred. No. 2.4e+03;
Matches 19; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
QY 3259 AGATATTATTGCTTTCCTTTT 3284
DB 5 ATATTTTTTTTTGTTTTTTTTT 30
RESULT 1788
ABA97620
ID ABA97620 standard; DNA; 30 BP.
XX
XX ABA97620;
AC
XX
XX 11-APR-2002 (first entry)
DT
XX
XX Poly i nucleotide sequence.
DE
XX
XX ss; fluorochrome; nucleic acid probe; fluorescence.
KW
XX
XX Unidentified.
OS
XX
XX JP2001286300-A.
PN
XX
XX 16-OCT-2001.
PD
XX
XX 20-APR-2000; 2000JP-00120097.
PP
XX
XX 20-APR-1999; 99JP-00111601.
PR
XX 24-AUG-1999; 99JP-00236666.
PR 30-AUG-1999; 99JP-00242693.
PR 01-FEB-2000; 2000JP-00028896.
XX
XX (BIOI-) BIOINDUSTRY KYOKAI SH.
PA (KANK-) KANKYO ENG KK.
PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.
XX
XX WPI; 2002-134193/18.
DR
XX
XX Measurement of nucleic acids, using a nucleic acid probe and analysis of
PT the obtained data.
XX
XX Example 5; Page 17; 34pp; Japanese.
XX
XX This invention relates to a method for measuring nucleic acids using a
CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe
CC decreases the fluorescence of the fluorochrome when hybridised with a
CC target nucleic acid, the decrease in the fluorescence is measured. The
CC method can be used for measuring a target nucleic acid
XX
XX Sequence 30 BP; 4 A; 1 C; 0 G; 25 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.8; DB 1; Length 30;
Best Local Similarity 73.1%; Pred. No. 2.4e+03;
Matches 19; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
QY 3259 AGATATTATTGCTTTCCTTTT 3284
DB 5 ATATTTTTTTTTGTTTTTTTTT 30
RESULT 1789
ABA97614
ID ABA97614 standard; DNA; 30 BP.
XX
XX ABA97614;
AC
XX
XX 11-APR-2002 (first entry)
DT
XX
XX Poly c nucleotide sequence.
DE
XX
XX ss; fluorochrome; nucleic acid probe; fluorescence.
KW
XX
XX Unidentified.
OS
XX
XX JP2001286300-A.
PN
XX
XX 16-OCT-2001.
PD
XX
XX 20-APR-2000; 2000JP-00120097.
PP
XX
XX 20-APR-1999; 99JP-00111601.
PR
XX 24-AUG-1999; 99JP-00236666.
PR 30-AUG-1999; 99JP-00242693.
PR 01-FEB-2000; 2000JP-00028896.
XX
XX (BIOI-) BIOINDUSTRY KYOKAI SH.
PA (KANK-) KANKYO ENG KK.
PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.
XX
XX WPI; 2002-134193/18.
DR
XX
XX Measurement of nucleic acids, using a nucleic acid probe and analysis of
PT the obtained data.
XX
XX Example 5; Page 17; 34pp; Japanese.
XX
XX This invention relates to a method for measuring nucleic acids using a
CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe
CC decreases the fluorescence of the fluorochrome when hybridised with a
CC target nucleic acid, the decrease in the fluorescence is measured. The
CC method can be used for measuring a target nucleic acid
XX
```

```

XX SQ Sequence 30 BP; 4 A; 0 C; 1 G; 25 T; 0 U; 0 Other;
    Query Match          0.4%; Score 14.8; DB 1; Length 30;
    Best Local Similarity 73.1%; Pred. No. 2.4e+03;
    Matches 19; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 3259 AGATATTTTATTTGCTTTGTCCTTTT 3284
    ||||| ||||| ||||| ||||| |||||
Db 5 ATATTTTTTTTGTGTTTTTTTTT 30

RESULT 1790
ABL95887
ID ABL95887 standard; DNA; 30 BP.
XX
AC ABL95887;
XX
DT 19-JUN-2002 (first entry)
XX
DE Probe poly c for assaying nucleic acids.
XX
KW Probe; polymorphism detection; mutation detection; disease diagnosis;
KW microbial identification; ss.
XX
OS Unidentified.
XX
PN WO200208414-A1.
XX
PD 31-JAN-2002.
XX
PF 27-JUN-2001; 2001WO-IB001147.
XX
PR 27-JUN-2000; 2000JP-00193133.
PR 03-AUG-2000; 2000JP-00236115.
PR 26-SEP-2000; 2000JP-00292483.
XX
XX (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
XX (KANK-) KANKYO ENG CO LTD.
XX
PI Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;
PI Yokomaku T;
XX
XX WPI; 2002-195876/25.
XX
PT Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
PT their polymorphism and mutation, particularly useful in science and
PT medicine for e.g. analytical applications, disease diagnosis and
PT microbial identification.
XX
PS Example 12; Page 60; 152pp; Japanese.
XX
CC The present invention relates to nucleic acid probes, which are useful
CC for assaying nucleic acids by hybridising with a target nucleic acid, in
CC which a single-stranded oligonucleotide is labelled with a fluorescent
CC substance and a quencher in a manner that the fluorescence intensity of
CC the hybridisation reaction system is increased after completion of the
CC hybridisation but no stem loop structure is formed. The probes are useful
CC for assaying nucleic acids and their polymorphism and mutation,
CC particularly useful for e.g. analytical applications, disease diagnosis
CC and microbial identification. The present sequence was used to illustrate
CC the invention
XX
SQ Sequence 30 BP; 4 A; 0 C; 1 G; 25 T; 0 U; 0 Other;
    Query Match          0.4%; Score 14.8; DB 1; Length 30;
    Best Local Similarity 73.1%; Pred. No. 2.4e+03;
    Matches 19; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 3259 AGATATTTTATTTGCTTTGTCCTTTT 3284
    ||||| ||||| ||||| ||||| |||||
Db 5 ATATTTTTTTTGTGTTTTTTTTT 30

RESULT 1791
ABL95893
ID ABL95893 standard; DNA; 30 BP.
XX
AC ABL95893;
XX
DT 19-JUN-2002 (first entry)
XX
DE Probe poly I for assaying nucleic acids.
XX
KW Probe; polymorphism detection; mutation detection; disease diagnosis;
KW microbial identification; ss.
XX
OS Unidentified.
XX
PN WO200208414-A1.
XX
PD 31-JAN-2002.
XX
PF 27-JUN-2001; 2001WO-IB001147.
XX
PR 27-JUN-2000; 2000JP-00193133.
PR 03-AUG-2000; 2000JP-00236115.
PR 26-SEP-2000; 2000JP-00292483.
XX
XX (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
XX (KANK-) KANKYO ENG CO LTD.
XX
PI Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;
PI Yokomaku T;
XX
XX WPI; 2002-195876/25.
XX
PT Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
PT their polymorphism and mutation, particularly useful in science and
PT medicine for e.g. analytical applications, disease diagnosis and
PT microbial identification.
XX
PS Example 12; Page 60; 152pp; Japanese.
XX
CC The present invention relates to nucleic acid probes, which are useful
CC for assaying nucleic acids by hybridising with a target nucleic acid, in
CC which a single-stranded oligonucleotide is labelled with a fluorescent
CC substance and a quencher in a manner that the fluorescence intensity of
CC the hybridisation reaction system is increased after completion of the
CC hybridisation but no stem loop structure is formed. The probes are useful
CC for assaying nucleic acids and their polymorphism and mutation,
CC particularly useful for e.g. analytical applications, disease diagnosis
CC and microbial identification. The present sequence was used to illustrate
CC the invention
XX
SQ Sequence 30 BP; 4 A; 1 C; 0 G; 25 T; 0 U; 0 Other;
    Query Match          0.4%; Score 14.8; DB 1; Length 30;
    Best Local Similarity 73.1%; Pred. No. 2.4e+03;
    Matches 19; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 3259 AGATATTTTATTTGCTTTGTCCTTTT 3284
    ||||| ||||| ||||| ||||| |||||
Db 5 ATATTTTTTTTGTGTTTTTTTTT 30

RESULT 1792
AAI14632
ID AAI14632 standard; DNA; 35 BP.
XX
AC AAI14632;
XX
DT 24-MAR-1999 (first entry)
XX
DE Triple helix forming nucleotides 4791-4725 of the n-myc gene.
XX

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KW Triple-helix forming region; Triplex formation; DNA detection;
 KW identification; bacteria; oncogene; virus; ds.
 OS Homo sapiens.
 XX US861244-A.
 PN 19-JAN-1999.
 XX 22-DEC-1993; 93US-00173489.
 XX 29-OCT-1992; 92US-00968436.
 XX (PROF-) PROFILE DIAGNOSTIC SCI INC.
 XX Hepburn AG, Wang C;
 PI WPI; 1999-130384/11.
 XX Assay of genetic sequences based on triplex formation from double
 PT stranded analyte - and hybrid of anchor and reporter sequences, with
 PT reporter released if triplex formation occurs, used e.g. to identify
 PT bacteria.
 XX Disclosure; Col 13-14; 168pp; English.
 PS The present sequence represents a potential triple-helix forming region.
 CC It can be used to demonstrate the assay of the invention. The assay
 CC comprises adding a sample containing double-stranded DNA test sequences,
 CC e.g. containing the present sequence, to an aqueous medium containing at
 CC least one complex of anchor DNA, attached to a solid support, and
 CC reporter DNA, where either a part of the anchor DNA or reporter DNA is
 CC designed to form a triple-strand structure with part of the test
 CC sequence. Triplex formation results in displacement of the reporter DNA
 CC which is detected as an indication of the presence of the DNA test
 CC sequence. The method is used to detect DNA sequences, particularly for
 CC identification of bacteria (by detecting genes for ribosomal RNA) in
 CC clinical samples, but also detection of oncogenes and Hepatitis B virus
 XX clinical samples, but also detection of oncogenes and Hepatitis B virus
 XX

XX 05-APR-2001; 2001WO-US011151.
 XX 05-APR-2000; 2000US-0194843P.
 XX (MOLE-) MOLECULAR STAGING INC.
 PA Abarzua P;
 PI WPI; 2002-049157/06.
 XX Detecting single nucleotide polymorphism involves amplifying target
 PT sequences using small primer probe that matches or mismatches to target
 PT sequence and extending primer probe which is then detected.
 XX Claim 15; Page 41; 67pp; English.
 XX The invention relates to detecting single nucleotide polymorphisms by
 CC contacting an allele-specific oligonucleotide primer (P1) with a target
 CC polynucleotide to form a hybridisation complex, where the target sequence
 CC is complementary to P1 at one end but the terminal nucleotide and the
 CC third nucleotide from the terminal at the other end of P1 may not be
 CC complementary. The complex is then contacted with an exonuclease
 CC deficient DNA polymerase enzyme under conditions that promote extension
 CC of P1 with the target DNA as the template, thereby forming an extended
 CC segment of P1. Oligonucleotide probes hybridising to one or more target
 CC polynucleotides distinguish between matched and mismatched 3' ends, hence
 CC the absence of sequence amplification indicates the presence of a single
 CC nucleotide mismatch. Primer sequences complementary to a sequence on an
 CC amplification target circle can be used in rolling circle amplification
 CC (RCA). The method is useful for diagnosing a disease caused by, induced
 CC by or related to a mutation in at least one gene, such as Parkinson's
 CC disease, polycystic kidney disease, Tay-Sachs disease, Huntington
 CC disease, sickle cell anaemia, haemophilia, cystic fibrosis, diabetes,
 CC obesity, cancers of the head, neck, skin, brain, oesophagus, stomach,
 CC lung, breast, colon, ovary, testis or prostate, leukaemia, lymphoma and
 CC melanoma. Sequences AAS95711-AAS95745 represent primers, targets and
 CC fluorescence decorators used in the detection of RCA products
 XX

SQ Sequence 35 BP; 1 A; 4 C; 0 G; 30 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 35;
 Best Local Similarity 64.7%; Pred. No. 2.6e+03;
 Matches 22; Conservative 0; Mismatches 12; Indels 0; Gaps 0;

OY 3300 TTCTATAGGATTTTCTTTAGGAGATTTATTTT 3333
 DB 1 TTTCTATCTTTCTTTCTTTTCTTTTCTTTTCTTTT 34

RESULT 1793
 AAS95728
 ID AAS95728 standard; DNA; 45 BP.
 XX AAS95728;
 AC AAS95728;
 XX 14-FEB-2002 (first entry)
 DT Allele discrimination P1 primer #12.
 XX Rolling circle amplification; single nucleotide polymorphism; anaemia;
 KW exonuclease deficient DNA polymerase; amplification target circle; RCA;
 KW Parkinson's disease; polycystic kidney disease; Tay-Sachs disease; ss;
 KW Huntington disease; sickle cell anaemia; haemophilia; cystic fibrosis;
 KW diabetes; obesity; cancer; head; neck; skin; brain; oesophagus; stomach;
 KW lung; breast; colon; ovary; testis; prostate; leukaemia; lymphoma;
 KW melanoma; PCR primer; sequencing primer; probe.
 XX Homo sapiens.
 OS Homo sapiens.
 XX WO200177390-A2.
 PN 18-OCT-2001.
 XX 18-OCT-2001.

OY 3262 TATTTATTTGCTTTGCTCTTTTCA 3287
 DB 12 TTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCA 37

RESULT 1794
 AAS95724
 ID AAS95724 standard; DNA; 45 BP.
 XX AAS95724;
 AC AAS95724;
 XX 14-FEB-2002 (first entry)
 DT Allele discrimination P1 primer #8.
 XX Rolling circle amplification; single nucleotide polymorphism; anaemia;
 KW exonuclease deficient DNA polymerase; amplification target circle; RCA;
 KW Parkinson's disease; polycystic kidney disease; Tay-Sachs disease; ss;
 KW Huntington disease; sickle cell anaemia; haemophilia; cystic fibrosis;
 KW diabetes; obesity; cancer; head; neck; skin; brain; oesophagus; stomach;
 KW lung; breast; colon; ovary; testis; prostate; leukaemia; lymphoma;
 KW melanoma; PCR primer; sequencing primer; probe.
 XX Homo sapiens.
 OS Homo sapiens.
 XX WO200177390-A2.
 PN 18-OCT-2001.
 XX 18-OCT-2001.

SQ Sequence 45 BP; 2 A; 5 C; 0 G; 38 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.8; DB 1; Length 45;
 Best Local Similarity 73.1%; Pred. No. 2.8e+03;
 Matches 19; Conservative 0; Mismatches 7; Indels 0; Gaps 0;


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PA (DNAP-) CENT DNA FINGERPRINTING & DIAGNOSTICS.
XX Nagaraku JG;
PI WPI; 2003-804317/75.
XX
XX New set of inter-simple sequence repeats (ISSR)-PCR primers for
PT genotyping eukaryotes, useful for genotyping diverse genomes of plant and
PT animal systems.
XX
XX Disclosure; Page 19; 60pp; English.
XX
XX The invention relates to a novel set of inter-simple sequence repeats
CC (ISSR)-PCR primers for genotyping eukaryotes. The primers of the
CC invention may be useful for genotyping diverse genomes of plant and
CC animal systems, in particular for distinguishing Basmati rice varieties
CC from non-Basmati rice varieties and traditional Basmati rice varieties
CC from evolved Basmati rice varieties. The current sequence is that of the
CC ISSR-related PCR primer of the invention.
XX
SQ Sequence 15 BP; 0 A; 0 C; 7 G; 7 T; 0 U; 1 Other;
Query Match 0.4%; Score 14.6; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 1.3e+03;
Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 2317 CTGTGTGTGTGTGTG 2331
DB 1 YTGTTGTGTGTGTG 15
RESULT 1797
ADD69514
ID ADD69514 standard; DNA; 15 BP.
XX
AC ADD69514;
XX
DT 15-JAN-2004 (first entry)
XX
DE ISSR-related PCR primer 1.
XX
KW inter-simple sequence repeat; ISSR; SSR; PCR; primer; genotyping; plant;
KW animal; Basmati rice; ss.
XX
OS Unidentified.
XX
PN WO2003085133-A2.
XX
PD 16-OCT-2003.
XX
PF 09-JAN-2003; 2003WO-IB000041.
XX
PR 08-APR-2002; 2002IN-CH000260.
XX
PA (DNAP-) CENT DNA FINGERPRINTING & DIAGNOSTICS.
XX Nagaraku JG;
XX
XX WPI; 2003-804317/75.
XX
XX New set of inter-simple sequence repeats (ISSR)-PCR primers for
PT genotyping eukaryotes, useful for genotyping diverse genomes of plant and
PT animal systems.
XX
XX Disclosure; Page 19; 60pp; English.
XX
XX The invention relates to a novel set of inter-simple sequence repeats
CC (ISSR)-PCR primers for genotyping eukaryotes. The primers of the
CC invention may be useful for genotyping diverse genomes of plant and
CC animal systems, in particular for distinguishing Basmati rice varieties
CC from non-Basmati rice varieties and traditional Basmati rice varieties
CC from evolved Basmati rice varieties. The current sequence is that of the
CC ISSR-related PCR primer of the invention.
XX
SQ Sequence 15 BP; 0 A; 0 C; 7 G; 7 T; 0 U; 1 Other;
Query Match 0.4%; Score 14.6; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 1.3e+03;
Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 2317 CTGTGTGTGTGTGTG 2331
DB 1 YTGTTGTGTGTGTG 15
RESULT 1797
ADD69514
ID ADD69514 standard; DNA; 15 BP.
XX
AC ADD69514;
XX
DT 15-JAN-2004 (first entry)
XX
DE ISSR-related PCR primer 1.
XX
KW inter-simple sequence repeat; ISSR; SSR; PCR; primer; genotyping; plant;
KW animal; Basmati rice; ss.
XX
OS Unidentified.
XX
PN WO2003085133-A2.
XX
PD 16-OCT-2003.
XX
PF 09-JAN-2003; 2003WO-IB000041.
XX
PR 08-APR-2002; 2002IN-CH000260.
XX
PA (DNAP-) CENT DNA FINGERPRINTING & DIAGNOSTICS.
XX Nagaraku JG;
XX
XX WPI; 2003-804317/75.
XX
XX New set of inter-simple sequence repeats (ISSR)-PCR primers for
PT genotyping eukaryotes, useful for genotyping diverse genomes of plant and
PT animal systems.
XX
XX Disclosure; Page 19; 60pp; English.
XX
XX The invention relates to a novel set of inter-simple sequence repeats
CC (ISSR)-PCR primers for genotyping eukaryotes. The primers of the
CC invention may be useful for genotyping diverse genomes of plant and
CC animal systems, in particular for distinguishing Basmati rice varieties
CC from non-Basmati rice varieties and traditional Basmati rice varieties
CC from evolved Basmati rice varieties. The current sequence is that of the
CC ISSR-related PCR primer of the invention.
XX
SQ Sequence 15 BP; 0 A; 0 C; 7 G; 7 T; 0 U; 1 Other;
Query Match 0.4%; Score 14.6; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 1.3e+03;
Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 2319 GTGTGTGTGTGTGTG 2333
DB 1 RTGTGTGTGTGTGTG 15
RESULT 1798
AAA29596
ID AAA29596 standard; DNA; 17 BP.
XX
AC AAA29596;
XX
DT 10-AUG-2000 (first entry)
XX
DE Human epidermal growth factor sense PCR primer.
XX
KW Hormone dependent cancer; hormone independent cancer; hormonal drug;
KW prostate cancer; breast cancer; cervical cancer; ovarian cancer;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200020034-A1.
XX
PD 13-APR-2000.
XX
PF 07-OCT-1999; 99WO-JP005533.
XX
PR 08-OCT-1998; 98JP-00286793.
XX
PA (TAKE ) TAKEDA CHEM IND LTD.
XX
PI Matsutani E, Naito K;
XX
DR WPI; 2000-303644/26.
XX
PT Hormonal drug-containing agents for retarding conversion of hormone-
PT dependent cancers into hormone-independent cancers, useful e.g. for
PT treating prostate and breast cancers.
XX
PS Example 1; Page 19; 31pp; Japanese.
XX
CC The present invention describes a hormonal drug-containing agent (I) for
CC retarding the conversion of a hormone-dependent cancer into a hormone-
CC independent cancer. The agents can be used to treat prostate, breast,
CC cervical and ovarian cancers and to make hormonal drugs for retarding the
CC conversion of a hormone-dependent cancer into a hormone-independent
CC cancer. The drug can retard the change of hormone-dependent cancers into
CC hormone-independent cancers effectively. The present sequence represents
CC a PCR primer which is used in an example from the present invention
XX
XX Sequence 17 BP; 2 A; 3 C; 6 G; 1 T; 0 U; 5 Other;
Query Match 0.4%; Score 14.6; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 1.5e+03;
Matches 12; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
QY 1618 CACAGGGACCTGGCTGC 1634
DB 1 CAYMGGAAYTTGGCHGC 17
RESULT 1799
AAA29598
ID AAA29598 standard; DNA; 17 BP.
XX
AC AAA29598;

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XX DT 10-AUG-2000 (first entry)
XX DE Human insulin sense PCR primer.
XX DE Hormone dependent cancer; hormone independent cancer; hormonal drug;
XX KW prostate cancer; breast cancer; cervical cancer; ovarian cancer;
XX KW PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200020034-A1.
XX PD 13-APR-2000.
XX PF 07-OCT-1999; 99WO-JP005533.
XX PR 08-OCT-1998; 98JP-00286793.
XX PA (TAKE ) TAKEDA CHEM IND LTD.
XX PI Matsutani E, Naito K;
XX DR WPI; 2000-303644/26.
XX PT Hormonal drug-containing agents for retarding conversion of hormone-
XX PT dependent cancers into hormone-independent cancers, useful e.g. for
XX PT treating prostate and breast cancers.
XX PS Example 1; Page 19; 31pp; Japanese.
XX CC The present invention describes a hormonal drug-containing agent (I) for
XX CC retarding the conversion of a hormone-dependent cancer into a hormone-
XX CC independent cancer. The agents can be used to treat prostate, breast,
XX CC cervical and ovarian cancers and to make hormonal drugs for retarding the
XX CC conversion of a hormone-dependent cancer into a hormone-independent
XX CC cancer. The drug can retard the change of hormone-dependent cancers into
XX CC hormone-independent cancers effectively. The present sequence represents
XX CC a PCR primer which is used in an example from the present invention
XX SQ Sequence 17 BP; 2 A; 4 C; 4 G; 1 T; 0 U; 6 Other;

Query Match 0.4%; Score 14.6; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 1.5e+03;
Matches 11; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 1618 CACAGGACCTGGCTGC 1634
DB 1 CAYMGRGACYTKGCWGC 17
||:::||:::||::||

RESULT 1800
ADH23252
ID ADH23252 standard; DNA; 17 BP.
XX AC ADH23252;
XX DT 25-MAR-2004 (first entry)
XX DE Degenerate sense PCR primer used to amplify the insulin receptor.
XX KW hormone dependent cancer; hormone; differentiation inducing agent;
XX KW luteinising hormone-releasing hormone; LH-RH; fat soluble vitamin;
XX KW prostate; ovarian; uterine; breast cancer; hormone independent cancer;
XX KW anti-tumour; PCR; primer; ss; insulin receptor.
XX OS Synthetic.
XX OS Unidentified.
XX PN JP2004002240-A.
XX PD 08-JAN-2004.
XX PF 31-MAY-2002; 2002JP-00160837.
XX PR 31-MAY-2002; 2002JP-00160837.
XX PA (TAKE ) TAKEDA CHEM IND LTD.
XX DR WPI; 2004-113108/12.
XX PT Novel therapeutic agent of hormone dependent cancer, comprising hormone
XX PT group, chemical agent and differentiation inducing agent, useful for
XX PT treating hormone dependent cancer in mammal.

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PF 31-MAY-2002; 2002JP-00160837.
XX 31-MAY-2002; 2002JP-00160837.
XX (TAKE ) TAKEDA CHEM IND LTD.
XX WPI; 2004-113108/12.
XX PT Novel therapeutic agent of hormone dependent cancer, comprising hormone
XX PT group, chemical agent and differentiation inducing agent, useful for
XX PT treating hormone dependent cancer in mammal.
XX PS Example 1; Page 14; 15pp; Japanese.
XX CC This invention relates to a novel therapeutic agent for the treatment of
XX CC hormone dependent cancer that comprises a hormone group chemical agent
XX CC and a differentiation inducing agent. Specifically, the hormone group
XX CC chemical agent refers to an agonist derived from the luteinising hormone-
XX CC releasing hormone (LH-RH), whereas the differentiation inducing agent is
XX CC preferably a fat soluble vitamin, or can be a nuclear receptor ligand,
XX CC histone acetylation regulation drug or a DNA methylation regulation drug.
XX CC The present invention describes using the LH-RH agonist as a preventative
XX CC or therapeutic agent for hormone dependent prostate, ovarian, uterine or
XX CC breast cancer, and can also delay change in hormone independent cancer.
XX CC Accordingly, the compositions of the invention are described as
XX CC exhibiting high anti-tumour activity. This oligonucleotide sequence is a
XX CC degenerate PCR primer used to amplify the insulin receptor, in an
XX CC exemplification of the invention.
XX SQ Sequence 17 BP; 2 A; 4 C; 4 G; 1 T; 0 U; 6 Other;

Query Match 0.4%; Score 14.6; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 1.5e+03;
Matches 11; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 1618 CACAGGACCTGGCTGC 1634
DB 1 CAYMGRGACYTKGCWGC 17
||:::||:::||::||

RESULT 1801
ADH23250
ID ADH23250 standard; DNA; 17 BP.
XX AC ADH23250;
XX DT 25-MAR-2004 (first entry)
XX DE Degenerate sense PCR primer used to amplify the EGF receptor.
XX KW hormone dependent cancer; hormone; differentiation inducing agent;
XX KW luteinising hormone-releasing hormone; LH-RH; fat soluble vitamin;
XX KW prostate; ovarian; uterine; breast cancer; hormone independent cancer;
XX KW anti-tumour; PCR; primer; ss; EGF receptor.
XX OS Synthetic.
XX OS Unidentified.
XX PN JP2004002240-A.
XX PD 08-JAN-2004.
XX PF 31-MAY-2002; 2002JP-00160837.
XX PR 31-MAY-2002; 2002JP-00160837.
XX PA (TAKE ) TAKEDA CHEM IND LTD.
XX DR WPI; 2004-113108/12.
XX PT Novel therapeutic agent of hormone dependent cancer, comprising hormone
XX PT group, chemical agent and differentiation inducing agent, useful for
XX PT treating hormone dependent cancer in mammal.

```

XX Example 1; Page 13; 15pp; Japanese.

XX This invention relates to a novel therapeutic agent for the treatment of

CC hormone dependent cancer that comprises a hormone group chemical agent

CC and a differentiation inducing agent. Specifically, the hormone group

CC chemical agent refers to an agonist derived from the luteinizing hormone-

CC releasing hormone (LH-RH), whereas the differentiation inducing agent is

CC preferably a fat soluble vitamin, or can be a nuclear receptor ligand,

CC histone acetylation regulation drug or a DNA methylation regulation drug.

CC The present invention describes using the LH-RH agonist as a preventative

CC or therapeutic agent for hormone dependent prostate, ovarian, uterine or

CC breast cancer, and can also delay change in hormone independent cancer.

CC Accordingly, the compositions of the invention are described as

CC exhibiting high anti-tumour activity. This oligonucleotide sequence is a

CC degenerate PCR primer used to amplify the epidermal growth factor (EGF)

CC receptor, in an exemplification of the invention.

XX Sequence 17 BP; 2 A; 3 C; 6 G; 1 T; 0 U; 5 Other;

SQ

Query Match 0.4%; Score 14.6; DB 1; Length 17;

Best Local Similarity 70.6%; Pred. No. 1.5e+03;

Matches 12; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 1618 CACAGGAGCTGGCTGC 1634

DB 1 CAYMGGGYTTGGCHC 17

RESULT 1802

ID AAD34155/c

XX AAD34155 standard; DNA; 20 BP.

AC AAD34155;

XX

XX 29-AUG-2003 (revised)

DT 16-JUL-2002 (first entry)

XX

DE Fugu rubripes lymphocyte kinase (LCK) amplifying PCR primer #2.

XX

XX T-lymphocyte modulator; autoimmune disorder; graft rejection; PCR;

KW Graft-versus-host disease; viral infection; lymphocyte kinase; LCK;

KW primer; ss.

OS Takifugu rubripes.

XX

PN WO200218619-A2.

XX

PD 07-MAR-2002.

XX

PF 16-AUG-2001; 2001WO-IL000765.

XX

PR 01-SEP-2000; 2000US-0229326P.

XX

PA (MOLE-) INST MOLECULAR & CELL BIOLOGY.

PA (EHLR/) EHRLICH G.

XX

PI Brenner S, Venkatesh B, Tan YH;

XX

DR WPI; 2002-329781/36.

XX

XX New nucleic acids, useful for regulating T-cell mediated immune

PT responses, e.g., suppressing T-lymphocytes in subjects with autoimmune

PT disorders, or enhancement in those with viral infections, comprises novel

PT T-cell active promoters.

XX

PS Example 1; Page 21; 67pp; English.

XX

XX The invention relates to an isolated nucleic acid which includes a

CC promoter sequence being transcriptionally functional in a T-lymphocyte

CC undergoing activation and transcriptionally less functional in the T-

CC lymphocyte prior to the activation. The nucleic acid is useful for

CC regulating T-cell mediated immune responses in mammals. Nucleic acid

CC molecules of the invention may be used to suppress or eliminate T-

CC lymphocytes undergoing activation to suppress T-lymphocyte mediated

CC immune response in individuals suffering from immune disorders, e.g.

CC autoimmune disorders such as graft rejection or graft-versus-host

CC disease. They may also be used to enhance T-lymphocyte mediated immune

CC response in individual suffering from, e.g. viral infection. The present

CC sequence is Fugu rubripes lymphocyte kinase (LCK) amplifying PCR primer

CC used in the exemplification of the invention. (Updated on 29-AUG-2003 to

XX standardise OS field)

SQ Sequence 20 BP; 1 A; 5 C; 5 G; 4 T; 0 U; 5 Other;

Query Match 0.4%; Score 14.6; DB 1; Length 20;

Best Local Similarity 70.0%; Pred. No. 1.8e+03;

Matches 14; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

QY 1750 AAGTGGATGGCGCTGAGGC 1769

DB 20 AARTGGACNGCNCNGARGC 1

RESULT 1803

ID AAQ30386

XX AAQ30386 standard; DNA; 21 BP.

AC AAQ30386;

XX

XX 25-MAR-2003 (revised)

DT 07-DEC-1992 (first entry)

XX

DE Oligomer TNF217 for forming triplex with HUMTNFAA target duplex.

XX

KW Tumour necrosis factor; herpes simplex; AIDS; modified; HIV; RSV; HPV;

KW malignancy; hepatitis; inflammation; ss.

XX

OS Synthetic.

XX

FH Key Location/Qualifiers

FT modified_base 1

FT /tag= a

FT /mod_base= OTHER

FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"

FT modified_base 2

FT /tag= b

FT /mod_base= OTHER

FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"

FT modified_base 3

FT /tag= c

FT /mod_base= OTHER

FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"

FT modified_base 4

FT /tag= d

FT /mod_base= OTHER

FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"

FT modified_base 7

FT /tag= e

FT /mod_base= OTHER

FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"

FT modified_base 9

FT /tag= f

FT /mod_base= OTHER

FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"

FT modified_base 11

FT /tag= g

FT /mod_base= OTHER

FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"

FT modified_base 13

FT /tag= h

FT /mod_base= OTHER

FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"

FT modified_base 15

FT /tag= i

FT /mod_base= OTHER

```
FT modified_base /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT 17 /*tag= j
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT 21
FT modified_base /*tag= k
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
XX
XX WO9209705-A1.
XX
XX 11-JUN-1992.
XX
XX 25-NOV-1991; 91WO-US008811.
XX
XX 23-NOV-1990; 90US-00617907.
XX 18-JAN-1991; 91US-00643382.
XX 08-APR-1991; 91US-00683420.
XX 17-APR-1991; 91US-00686544.
XX 17-APR-1991; 91US-00686546.
XX 17-APR-1991; 91US-00686547.
XX 27-SEP-1991; 91US-00766733.
XX
XX (GILE-) GILEAD SCI INC.
XX
XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX WPI; 1992-217083/26.
XX
XX New oligomers contg. modified bases - which form a triplex with G-C
XX doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX herpes malignancy and inflammation.
XX
XX Claim 12; Page 70; 77pp; English.
XX
XX The synthetic oligomer is capable of forming a triplex at physiological
XX pH with a purine rich target sequence by coupling into the major groove
XX of the duplex. The specific target sequence of this oligomer is the human
XX tumour necrosis factor beginning at nucleotide 1137 contg. a purine rich
XX sequence concd. on one strand of the duplex. The oligomer, and others
XX like it are useful in diagnosis and therapy of diseases characterised by
XX specific DNA duplex targets, e.g. HPV; HER; HIV, hepatitis B, herpes,
XX malignant tumours and inflammation. The triple helices form under mild
XX conditions thus assays may be carried out without subjecting the test
XX specimen to harsh conditions. See also AAQ25452-25501 and AAQ30226-448.
XX (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 21 BP; 11 A; 0 C; 0 G; 10 T; 0 U; 0 Other;
```

```
Query Match 0.4%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 1.8e+03;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
```

```
QY 3458 AAGTTTATATATCTATATA 3478
DB 1 AAAATTATATATATATTTA 21
```

```
RESULT 1804
AAZ90067
ID AAZ90067 standard; DNA; 22 BP.
```

```
XX
XX AAZ90067;
AC
XX 09-MAY-2000 (first entry)
DT
XX Oligonucleotide #1 used in gag-pol expression cassette construction.
DE
XX
XX Gag; pol; retroviral vector construct; gag/pol expression cassette;
XX anticancer; antiviral; immunomodulatory; cytotoxin; prodrug activator;
XX replacement gene; antisense sequence; ribozyme; tumour prevention;
XX viral infection; genetic disorder; ss.
```

```
XX Synthetic.
OS
XX US6013517-A.
PN
XX 11-JAN-2000.
PD
XX
XX 05-MAY-1997; 97US-00850961.
PF
XX
XX 09-MAY-1994; 94US-00240030.
PR
XX 09-MAY-1995; 95US-00437465.
PR
XX 06-MAY-1996; 96US-00643411.
PR
XX 26-SEP-1996; 96US-00721327.
XX
XX (CHIR ) CHIRON CORP.
XX
XX Depolo NJ, Chada S, Sauter S, Bodner M, Driver DA, Respass JG;
XX WPI; 2000-159877/14.
XX
XX New retroviral construct, used to produce retroviral particles for gene
XX therapy, containing a gag/pol sequence that includes at least two stop
XX codons, incapable of producing replicable virus by recombination.
XX
XX Example 3; Col 24; 63pp; English.
XX
XX This sequence represents an oligonucleotide used in the construction of
XX gag-pol expression cassettes. The invention relates to a retroviral
XX vector construct which consists of a 5'-long terminal repeat (5'-LTR); a
XX tRNA binding site; an origin of second strand DNA synthesis; a 3'-LTR and
XX gag/pol sequences modified to contain two or more stop codons. The
XX invention also relates to a gag/pol expression cassette, and an env
XX expression cassette. The retroviral construct has anticancer, antiviral
XX and immunomodulatory activity. The retroviral constructs are used to
XX produce recombinant retroviral particles for use in gene transfer,
XX particularly gene therapy, e.g. to deliver heterologous sequences that
XX encode cytotoxins, prodrug activators, replacement genes, antisense
XX sequences or ribozymes, immune accessory molecules and viral immunogens,
XX particularly for treatment or prevention of tumours, viral infections and
XX genetic disorders
XX
XX Sequence 22 BP; 9 A; 3 C; 2 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 2828 ATACATATATATATATACAT 2848
DB 1 ATATATATATATCGATACCAT 21
RESULT 1805
ABK33880
ID ABK33880 standard; DNA; 22 BP.
XX
XX ABK33880;
AC
XX
XX 08-MAY-2002 (first entry)
DT
XX
XX Gag/pol expression cassette construction primer #1.
XX
XX MoMLV; Moloney murine leukaemia virus; mouse; retroviral backbone; LTR;
XX gag/pol expression cassette; gag; pol; env; integrase; gene therapy; ss;
XX tumour; cancer; viral infection; immune response; autoimmune response;
XX graft rejection; cytostatic; antiviral; immunostimulant; PCR; primer;
XX immunosuppressive; murine leukaemia virus 4070A amphotropic envelope;
XX bovine growth hormone polyadenylation sequence; long terminal repeat.
XX
XX Mus sp.
OS
XX Synthetic.
XX
XX US6333195-B1.
PN
```

```
XX 25-DEC-2001.
XX
XX 07-JAN-2000; 2000US-00479776.
XX
XX 09-MAY-1994; 94US-00240030.
XX
XX 09-MAY-1995; 95US-00437465.
XX
XX 06-MAY-1996; 96US-00643411.
XX
XX 26-SEP-1996; 96US-00721327.
XX
XX 05-MAY-1997; 97US-00850961.
XX
XX (CHIR ) CHIRON CORP.
XX
XX Respass JG, Depolo NJ, Chada S, Sauter S, Bodner M, Driver DA;
XX WPI; 2002-163181/21.
XX
XX New gag/pol expression cassette, for preparing retroviral particles for
XX gene therapy, comprises a promoter, a gag/pol gene, and a polyadenylation
XX sequence, and cannot form a replication competent virus by homologous
XX recombination.
XX
XX Example 3; Col 24; 63pp; English.
XX
XX The invention relates to a gag/pol expression cassette comprising a
XX promoter, a gag/pol gene (I) and a polyadenylation sequence in which the
XX 5' end of (I) has been modified to contain codons that are degenerate for
XX gag, or the 3' end of (I) has been deleted without affecting the
XX biological activity of the encoded integrase. The expression cassette and
XX similar cassettes that express env protein, are used to produce
XX recombinant retroviral particles by homologous recombination. These
XX particles are gene transfer vectors, particularly for gene therapy of
XX tumours or viral infections, also to induce an immune response, to treat
XX or prevent diseases, or to suppress graft rejection or immune/autoimmune
XX responses. This sequence represents an oligonucleotide primer used in
XX construction of gag/pol expression cassettes of the invention
XX
XX Sequence 22 BP; 9 A; 3 C; 2 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.6; DB 1; Length 22;
XX Best Local Similarity 81.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 2828 ATACATATATATATATACAT 2848
XX ||||| ||||| |||||
XX Db 1 ATATATATATATCGATACCAT 21
XX
XX RESULT 1806
XX ADH70330/C
XX ID ADH70330 standard; DNA; 27 BP.
XX
XX AC ADH70330;
XX
XX
XX 25-MAR-2004 (first entry)
XX
XX Human Vbeta gene repeat sequence #120.
XX
XX human; T-cell associated disease; Vbeta; autoimmune disease;
XX degenerative nervous system disease; graft versus host disease;
XX hypersensitivity disease; infectious disease; neoplastic disease;
XX Addison's disease; atrophic gastritis;
XX degenerative nervous system disease; multiple sclerosis;
XX Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
XX allergy; type II hypersensitivity; Goodpasture's syndrome;
XX type IV hypersensitivity; leprosy; infectious disease; viral infection;
XX HIV; fungal infection; Candida; parasitic infection; schistosoma;
XX filaria; bacterial infection; Mycobacterium; neoplastic disease;
XX lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
XX breast cancer; ds.
XX
XX Homo sapiens.
XX
XX OS
XX PN
```

```
PN US2002150891-A1.
XX
XX 17-OCT-2002.
XX
XX 05-MAR-1999; 99US-00263959.
XX
XX 19-SEP-1994; 94US-00309335.
XX
XX 19-SEP-1995; 95US-00531241.
XX
XX (HOOD/) HOOD L E.
XX (ROWE/) ROWEN L.
XX
XX Hood LE, Rowen L;
XX
XX WPI; 2004-059052/06.
XX
XX Kit for diagnosing and treating T-cell associated diseases e.g.
XX autoimmune, degenerative nervous system and infectious disease, comprises
XX nucleic acid primers specifically priming and allowing amplification of a
XX Vbeta gene.
XX
XX Disclosure; SEQ ID NO 524; 164pp; English.
XX
XX The invention relates to a kit for diagnosing and treating T-cell
XX associated diseases which comprises a panel of nucleic acid primers
XX specifically priming and allowing amplification of each Vbeta gene,
XX VbetARNA or cDNA. The kit is useful for diagnosing organ transplant
XX rejection and diagnosing and treating T-cell associated diseases
XX including autoimmune diseases, degenerative nervous system diseases,
XX graft versus host disease, hypersensitivity diseases, infectious diseases
XX and neoplastic diseases. Autoimmune diseases include Addison's disease,
XX atrophic gastritis. Degenerative nervous system diseases include multiple
XX sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
XX I hypersensitivities such as contact with allergens that lead to
XX allergies, Type II hypersensitivities such as those present in
XX Goodpasture's syndrome and type IV hypersensitivities such as those
XX manifested in leprosy. Infectious diseases include viral infections
XX caused by viruses such as HIV, fungal infections such as those caused by
XX the yeast genus Candida, parasitic infections such as those caused by
XX schistosomes, filaria and bacterial infections such as those caused by
XX Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
XX such as leukaemias, lymphomas and cancers such as cancer of the brain,
XX breast. The present sequence represents a Vbeta gene repeat sequence.
XX
XX Sequence 27 BP; 23 A; 0 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.6; DB 1; Length 27;
XX Best Local Similarity 81.0%; Pred. No. 2.3e+03;
XX Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 3264 TTTTATTTGCTTTGCTCTTTT 3284
XX ||||| ||||| |||||
XX Db 26 TTTTATTTGCTTTGCTCTTTT 6
XX
XX RESULT 1807
XX AAF74912/C
XX ID AAF74912 standard; DNA; 29 BP.
XX
XX AC AAF74912;
XX
XX 23-MAY-2001 (first entry)
XX
XX CD40L poly-A tract sequence SEQ ID NO:9.
XX
XX Human; CD40L; promoter; CD40 ligand promoter; rheumatoid arthritis;
XX diagnosis; ankiarthritic; antirheumatic; immunosuppressive;
XX antiinflammatory; inflammatory disease; autoimmune disease; ds.
XX
XX Homo sapiens.
XX
XX OS
XX PN WO200119844-A1.
XX
```

```

PD 22-MAR-2001.
XX
XX
PF 13-SEP-2000; 2000WO-US024966.
XX
XX
PR 13-SEP-1999; 99US-0153625P.
XX
XX
PA (NYRE-) NEW YORK SOC RELIEF RUPTURED & CRIPPLED.
XX
XX
PI Crow MK, Li Y;
XX
XX
DR WPI; 2001-244776/25.
XX
XX
PT New altered CD40L promoter for use in the study, diagnosis and treatment
PT of a variety of inflammatory disorders and autoimmune diseases, such as
PT rheumatoid arthritis.
XX
XX
XX Example 1; Fig 3; 90pp; English.
XX
XX
XX The present invention describes an isolated, purified nucleic acid, which
XX is an altered CD40 ligand (CD40L) promoter (I) for CD40 ligand, having
XX residues 331-455 of the sequence comprising 455 nucleotides given in
XX AAF74905 where A in the wild type sequence at position 331 (corresponding
XX to position -125) is replaced with C. (I) has antiarthritic,
XX antirheumatic, immunosuppressive and antiinflammatory activities, and can
XX be used in gene therapy. (I) is useful in the study, diagnosis and
XX treatment of inflammatory and autoimmune diseases, as well as diseases in
XX which elevated expression of CD40L is a factor, e.g., rheumatoid
XX arthritis. The present sequence represents a CD40L poly-A tract sequence
XX which is used in an example from the present invention
XX
XX SQ Sequence 29 BP; 22 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.6; DB 1; Length 29;
XX Best Local Similarity 69.0%; Pred. No. 2.4e+03;
XX Matches 20; Conservative 0; Mismatches 9; Indels 0; Gaps 0;
XX
XX QY 3304 ATAGGATTTTCTTTAGGAGATTATTT 3332
XX | | | | | | | | | | | | | | | | | |
XX Db 29 AAAGGTTTTTGTGTTTTGTTTTTTTTT 1
XX
XX RESULT 1808
XX AAF74924/C
XX ID AAF74924 standard; DNA; 29 BP.
XX
XX AC AAF74924;
XX
XX DT 23-MAY-2001 (first entry)
XX
XX DE CD40L poly-A tract sequence SEQ ID NO:21.
XX
XX KW Human; CD40L; promoter; CD40 ligand promoter; rheumatoid arthritis;
XX diagnosis; antiarthritic; antirheumatic; immunosuppressive;
XX antinflammatory; inflammatory disease; autoimmune disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200119844-A1.
XX
XX AC AAF74924;
XX
XX DT 23-MAY-2001 (first entry)
XX
XX DE CD40L poly-A tract sequence SEQ ID NO:21.
XX
XX KW Human; CD40L; promoter; CD40 ligand promoter; rheumatoid arthritis;
XX diagnosis; antiarthritic; antirheumatic; immunosuppressive;
XX antinflammatory; inflammatory disease; autoimmune disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200119844-A1.
XX
XX PD 22-MAR-2001.
XX
XX PF 13-SEP-2000; 2000WO-US024966.
XX
XX PR 13-SEP-1999; 99US-0153625P.
XX
XX PA (NYRE-) NEW YORK SOC RELIEF RUPTURED & CRIPPLED.
XX
XX PI Crow MK, Li Y;
XX
XX DR WPI; 2001-244776/25.
XX
XX PT New altered CD40L promoter for use in the study, diagnosis and treatment
XX of a variety of inflammatory disorders and autoimmune diseases, such as
XX rheumatoid arthritis.
XX
XX PS Example 1; Fig 3; 90pp; English.
XX
XX CC The present invention describes an isolated, purified nucleic acid, which
XX is an altered CD40 ligand (CD40L) promoter (I) for CD40 ligand, having
XX residues 331-455 of the sequence comprising 455 nucleotides given in
XX AAF74905 where A in the wild type sequence at position 331 (corresponding
XX to position -125) is replaced with C. (I) has antiarthritic,
XX antirheumatic, immunosuppressive and antiinflammatory activities, and can
XX be used in gene therapy. (I) is useful in the study, diagnosis and
XX treatment of inflammatory and autoimmune diseases, as well as diseases in
XX which elevated expression of CD40L is a factor, e.g., rheumatoid
XX arthritis. The present sequence represents a CD40L poly-A tract sequence
XX which is used in an example from the present invention
XX
XX SQ Sequence 29 BP; 22 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.6; DB 1; Length 29;
XX Best Local Similarity 69.0%; Pred. No. 2.4e+03;
XX Matches 20; Conservative 0; Mismatches 9; Indels 0; Gaps 0;
XX
XX QY 3304 ATAGGATTTTCTTTAGGAGATTATTT 3332
XX | | | | | | | | | | | | | | | | | |
XX Db 29 AAAGGTTTTTGTGTTTTGTTTTTTTTT 1
XX
XX RESULT 1809
XX AAF74919/C
XX ID AAF74919 standard; DNA; 29 BP.
XX
XX AC AAF74919;
XX
XX DT 23-MAY-2001 (first entry)
XX
XX DE CD40L poly-A tract sequence SEQ ID NO:16.
XX
XX KW Human; CD40L; promoter; CD40 ligand promoter; rheumatoid arthritis;
XX diagnosis; antiarthritic; antirheumatic; immunosuppressive;
XX antinflammatory; inflammatory disease; autoimmune disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200119844-A1.
XX
XX PD 22-MAR-2001.
XX
XX PF 13-SEP-2000; 2000WO-US024966.
XX
XX PR 13-SEP-1999; 99US-0153625P.
XX
XX PA (NYRE-) NEW YORK SOC RELIEF RUPTURED & CRIPPLED.
XX
XX PI Crow MK, Li Y;
XX
XX DR WPI; 2001-244776/25.
XX
XX PT New altered CD40L promoter for use in the study, diagnosis and treatment
XX of a variety of inflammatory disorders and autoimmune diseases, such as
XX rheumatoid arthritis.
XX
XX PS Example 1; Fig 3; 90pp; English.
XX
XX CC The present invention describes an isolated, purified nucleic acid, which
XX is an altered CD40 ligand (CD40L) promoter (I) for CD40 ligand, having
XX residues 331-455 of the sequence comprising 455 nucleotides given in
XX AAF74905 where A in the wild type sequence at position 331 (corresponding
XX to position -125) is replaced with C. (I) has antiarthritic,
XX antirheumatic, immunosuppressive and antiinflammatory activities, and can
XX be used in gene therapy. (I) is useful in the study, diagnosis and
XX treatment of inflammatory and autoimmune diseases, as well as diseases in
XX which elevated expression of CD40L is a factor, e.g., rheumatoid
XX arthritis. The present sequence represents a CD40L poly-A tract sequence
XX which is used in an example from the present invention
XX
XX SQ Sequence 29 BP; 22 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.6; DB 1; Length 29;
XX Best Local Similarity 69.0%; Pred. No. 2.4e+03;
XX Matches 20; Conservative 0; Mismatches 9; Indels 0; Gaps 0;
XX
XX QY 3304 ATAGGATTTTCTTTAGGAGATTATTT 3332
XX | | | | | | | | | | | | | | | | | |
XX Db 29 AAAGGTTTTTGTGTTTTGTTTTTTTTT 1
XX
XX RESULT 1809
XX AAF74919/C
XX ID AAF74919 standard; DNA; 29 BP.
XX
XX AC AAF74919;
XX
XX DT 23-MAY-2001 (first entry)
XX
XX DE CD40L poly-A tract sequence SEQ ID NO:16.
XX
XX KW Human; CD40L; promoter; CD40 ligand promoter; rheumatoid arthritis;
XX diagnosis; antiarthritic; antirheumatic; immunosuppressive;
XX antinflammatory; inflammatory disease; autoimmune disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200119844-A1.
XX
XX PD 22-MAR-2001.
XX
XX PF 13-SEP-2000; 2000WO-US024966.
XX
XX PR 13-SEP-1999; 99US-0153625P.
XX
XX PA (NYRE-) NEW YORK SOC RELIEF RUPTURED & CRIPPLED.
XX
XX PI Crow MK, Li Y;
XX
XX DR WPI; 2001-244776/25.
XX
XX PT New altered CD40L promoter for use in the study, diagnosis and treatment
XX of a variety of inflammatory disorders and autoimmune diseases, such as
XX rheumatoid arthritis. The present sequence represents a CD40L poly-A tract sequence

```

```

CC  which is used in an example from the present invention
SQ  Sequence 29 BP; 22 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

    Query Match      0.4%; Score 14.6; DB 1; Length 29;
    Best Local Similarity 69.0%; Pred. No. 2.4e+03;
    Matches 20; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

QY  3304 ATAGGATTTTCTTTAGGAGATTATTTT 3332
Db  ||||| ||||| ||||| ||||| |||||
    29 AAAGGTTTGTGTTTGTGTTTGTGTTT 1

RESULT 1810
AAF74911/C
ID  AAF74911 standard; DNA; 29 BP.
XX
AC  AAF74911;
XX
DT  23-MAY-2001 (first entry)
XX
DE  CD40L poly-A tract sequence SEQ ID NO:8.
XX
KW  Human; CD40L; promoter; CD40 ligand promoter; rheumatoid arthritis;
KW  diagnosis; antiarthritic; antirheumatic; immunosuppressive;
KW  antinflammatory; inflammatory disease; autoimmune disease; ds.
XX
OS  Homo sapiens.
XX
PN  WO200119844-A1.
XX
PD  22-MAR-2001.
XX
PF  13-SEP-2000; 2000WO-US024966.
XX
PR  13-SEP-1999; 99US-0153625P.
XX
PA  (NYRE-) NEW YORK SOC RELIEF RUPTURED & CRIPPLED.
XX
PI  Crow MK, Li Y;
XX
DR  WPI; 2001-244776/25.
XX
PT  New altered CD40L promoter for use in the study, diagnosis and treatment
PT  of a variety of inflammatory disorders and autoimmune diseases, such as
PT  rheumatoid arthritis.
XX
PS  Example 1; Fig 3; 90pp; English.
XX
CC  The present invention describes an isolated, purified nucleic acid, which
CC  is an altered CD40 ligand (CD40L) promoter (I) for CD40 ligand, having
CC  residues 331-455 of the sequence comprising 455 nucleotides given in
CC  AAF74905 where A in the wild type sequence at position 331 (corresponding
CC  to position -125) is replaced with C. (I) has antiarthritic,
CC  antirheumatic, immunosuppressive and antinflammatory activities, and can
CC  be used in gene therapy. (I) is useful in the study, diagnosis and
CC  treatment of inflammatory and autoimmune diseases, as well as diseases in
CC  which elevated expression of CD40L is a factor, e.g., rheumatoid
CC  arthritis. The present sequence represents a CD40L poly-A tract sequence
CC  which is used in an example from the present invention
XX
SQ  Sequence 29 BP; 22 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

    Query Match      0.4%; Score 14.6; DB 1; Length 29;
    Best Local Similarity 69.0%; Pred. No. 2.4e+03;
    Matches 20; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

QY  3304 ATAGGATTTTCTTTAGGAGATTATTTT 3332
Db  ||||| ||||| ||||| ||||| |||||
    29 AAAGGTTTGTGTTTGTGTTTGTGTTT 1

RESULT 1811
AAF74911/C
ID  AAF74911 standard; DNA; 29 BP.
XX
AC  AAF74911;
XX
DT  23-MAY-2001 (first entry)
XX
DE  CD40L poly-A tract sequence SEQ ID NO:8.
XX
KW  Human; CD40L; promoter; CD40 ligand promoter; rheumatoid arthritis;
KW  diagnosis; antiarthritic; antirheumatic; immunosuppressive;
KW  antinflammatory; inflammatory disease; autoimmune disease; ds.
XX
OS  Homo sapiens.
XX
PN  WO200119844-A1.
XX
PD  22-MAR-2001.
XX
PF  13-SEP-2000; 2000WO-US024966.
XX
PR  13-SEP-1999; 99US-0153625P.
XX
PA  (NYRE-) NEW YORK SOC RELIEF RUPTURED & CRIPPLED.
XX
PI  Crow MK, Li Y;
XX
DR  WPI; 2001-244776/25.
XX
PT  New altered CD40L promoter for use in the study, diagnosis and treatment
PT  of a variety of inflammatory disorders and autoimmune diseases, such as
PT  rheumatoid arthritis.
XX
PS  Example 1; Fig 3; 90pp; English.
XX
CC  The present invention describes an isolated, purified nucleic acid, which
CC  is an altered CD40 ligand (CD40L) promoter (I) for CD40 ligand, having
CC  residues 331-455 of the sequence comprising 455 nucleotides given in
CC  AAF74905 where A in the wild type sequence at position 331 (corresponding
CC  to position -125) is replaced with C. (I) has antiarthritic,
CC  antirheumatic, immunosuppressive and antinflammatory activities, and can
CC  be used in gene therapy. (I) is useful in the study, diagnosis and
CC  treatment of inflammatory and autoimmune diseases, as well as diseases in
CC  which elevated expression of CD40L is a factor, e.g., rheumatoid
CC  arthritis. The present sequence represents a CD40L poly-A tract sequence
CC  which is used in an example from the present invention
XX
SQ  Sequence 29 BP; 22 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

    Query Match      0.4%; Score 14.6; DB 1; Length 29;
    Best Local Similarity 69.0%; Pred. No. 2.4e+03;
    Matches 20; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

QY  3304 ATAGGATTTTCTTTAGGAGATTATTTT 3332
Db  ||||| ||||| ||||| ||||| |||||
    29 AAAGGTTTGTGTTTGTGTTTGTGTTT 1

RESULT 1811
AAF74923/C
ID  AAF74923 standard; DNA; 29 BP.
XX
AC  AAF74923;
XX
DT  23-MAY-2001 (first entry)
XX
DE  CD40L poly-A tract sequence SEQ ID NO:20.
XX
KW  Human; CD40L; promoter; CD40 ligand promoter; rheumatoid arthritis;
KW  diagnosis; antiarthritic; antirheumatic; immunosuppressive;
KW  antinflammatory; inflammatory disease; autoimmune disease; ds.
XX
OS  Homo sapiens.
XX
PN  WO200119844-A1.
XX
PD  22-MAR-2001.
XX
PF  13-SEP-2000; 2000WO-US024966.
XX
PR  13-SEP-1999; 99US-0153625P.
XX
PA  (NYRE-) NEW YORK SOC RELIEF RUPTURED & CRIPPLED.
XX
PI  Crow MK, Li Y;
XX
DR  WPI; 2001-244776/25.
XX
PT  New altered CD40L promoter for use in the study, diagnosis and treatment
PT  of a variety of inflammatory disorders and autoimmune diseases, such as
PT  rheumatoid arthritis.
XX
PS  Example 1; Fig 3; 90pp; English.
XX
CC  The present invention describes an isolated, purified nucleic acid, which
CC  is an altered CD40 ligand (CD40L) promoter (I) for CD40 ligand, having
CC  residues 331-455 of the sequence comprising 455 nucleotides given in
CC  AAF74905 where A in the wild type sequence at position 331 (corresponding
CC  to position -125) is replaced with C. (I) has antiarthritic,
CC  antirheumatic, immunosuppressive and antinflammatory activities, and can
CC  be used in gene therapy. (I) is useful in the study, diagnosis and
CC  treatment of inflammatory and autoimmune diseases, as well as diseases in
CC  which elevated expression of CD40L is a factor, e.g., rheumatoid
CC  arthritis. The present sequence represents a CD40L poly-A tract sequence
CC  which is used in an example from the present invention
XX
SQ  Sequence 29 BP; 22 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

    Query Match      0.4%; Score 14.6; DB 1; Length 29;
    Best Local Similarity 69.0%; Pred. No. 2.4e+03;
    Matches 20; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

QY  3304 ATAGGATTTTCTTTAGGAGATTATTTT 3332
Db  ||||| ||||| ||||| ||||| |||||
    29 AAAGGTTTGTGTTTGTGTTTGTGTTT 1

RESULT 1812
AAF60442/C
ID  AAF60442 standard; DNA; 39 BP.
XX
AC  AAF60442;
XX
DT  27-APR-2001 (first entry)
XX
DE  DNA oligonucleotide #2.
XX
KW  Protein-RNA fusion; ss.
XX
OS  Unidentified.
XX
FH  Key Location/Qualifiers

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```
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "Pso-T, where Pso is a psoralen C2 amidite"
FT modified_base 39
FT /*tag= b
FT /mod_base= OTHER
FT /note= "C-Pu, where Pu is Puromycin-CPG"
XX WO200107657-A1.
XX 01-FEB-2001.
XX
XX 19-JUL-2000; 2000WO-US019653.
XX
XX 27-JUL-1999; 99US-0145834P.
XX
XX (PHYL-) PHYLOS INC.
XX
XX Kurz M, Lohse P, Wagner R;
XX WPI; 2001-182803/18.
XX
XX Affixing a peptide acceptor to an RNA molecule useful for producing
XX fusion proteins for isolating proteins or nucleic acids with desired
XX properties through attachment of a peptide acceptor to the 3' end of an
XX RNA molecule.
XX
XX Example 5; Page 19; 56pp; English.
XX
XX The present invention relates to a method for affixing a peptide acceptor
XX to an RNA molecule through the formation of a covalent bond, noncovalent
XX bond, or by chemical ligation. The method is useful for producing RNA-
XX protein fusions which can be used for the isolation of proteins or
XX nucleic acids with desired properties from large pools of partially or
XX completely random amino acid or nucleic acid sequences. The present
XX sequence is a DNA oligonucleotide used in the present invention
XX
XX Sequence 39 BP; 28 A; 5 C; 2 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.6; DB 1; Length 39;
XX Best Local Similarity 69.0%; Pred. No. 2.8e+03;
XX Matches 20; Conservative 0; Mismatches 9; Indels 0; Gaps 0;
XX
QY 3262 TATTTATTGCTTTCCTCTTTTCAGGA 3290
Db 35 TTTTTCCTTTTTCCTTTTTCAGGA 7

RESULT 1813
ABK99271/c
ID ABK99271 standard; RNA; 40 BP.
XX
AC ABK99271;
XX
DT 21-OCT-2002 (first entry)
XX
DE Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #1.
XX
KW Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
XX
OS Synthetic.
XX
PN US2002064771-A1.
XX
XX 30-MAY-2002.
XX
XX 06-APR-2001; 2001US-00828034.
XX
XX 07-APR-2000; 2000US-0195852P.
XX
XX (ZHON/) ZHONG W.
XX (HONG/) HONG Z.
PA
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PA (FERR/) FERRARI E.
XX
XX Zhong W, Hong Z, Ferrari E;
XX
XX WPI; 2002-582330/62.
XX
XX Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
XX nucleotide-long template to which a 2 nucleotide-long primer is annealed,
XX and template and primer which do not form a stable duplex in the absence
XX of HCV NS5B.
XX
XX Example; Page 6; 17pp; English.
XX
XX The invention relates to a replicase complex comprising a hepatitis C
XX virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
XX complementary nucleic acid primer which is annealed to the 3' terminus of
XX the template, where the template is at least three nucleotides and the
XX primer is two or three nucleotides, and the template and primer do not
XX form a stable duplex in solution in the absence of the HCV NS5B protein.
XX The complex is useful for detecting HCV replicase activity and permits
XX establishment of sensitive RNA-dependent RNA polymerase assays to screen
XX and evaluate antiviral inhibitors and to improve the specificity and
XX efficacy of the inhibitors. The complex is also useful in the development
XX of a reliable system for determining kinetic and thermodynamic constants
XX of HCV NS5B-catalysed nucleotide incorporation and investigation of
XX mechanistic inhibitors for mis-incorporation or chain termination.
XX Specifically, the short RNA template and primer pairs are useful in
XX screening assays which are used for determining kinetic, thermodynamic
XX and mechanistic properties of NS5B replication and ultimately in the
XX development of inhibitors of NS5B. Newly identified inhibitors of
XX replicase activity may be used for developing anti-HCV pharmaceuticals.
XX Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
XX templates
XX
XX Sequence 40 BP; 29 A; 4 C; 4 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.6; DB 1; Length 40;
XX Best Local Similarity 69.0%; Pred. No. 2.8e+03;
XX Matches 20; Conservative 0; Mismatches 9; Indels 0; Gaps 0;
XX
QY 3257 GAAGATATTTTATTTGCTTTTCCTTTT 3285
Db 35 GAAGTCCTTTTTCCTTTTTCCTTTT 7

RESULT 1814
AAD27120/c
ID AAD27120 standard; RNA; 40 BP.
XX
AC AAD27120;
XX
DT 09-APR-2002 (first entry)
XX
DE RNA template with stable tetraloop, used to direct HCV RNA synthesis.
XX
KW Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;
XX lead compound; RNA polymerase; ss.
XX
OS Unidentified.
XX
XX Key Location/Qualifiers
XX stem_loop 29..40 /*tag= a
XX misc_binding 29..32 /*tag= b
XX misc_binding 37..40 /*tag= c
XX /*bound_moiety= "Nucleotides 40-37"
XX /*bound_moiety= "Nucleotides 32-29"
XX
XX US6322966-B1.
XX
XX 27-NOV-2001.
PD
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XX 11-MAY-1999; 99US-00309670.
PF XX
XX 11-MAY-1999; 99US-00309670.
PR XX
XX (ZHON/) ZHONG W.
PA (HONG/) HONG Z.
PA (LAU/) LAU J Y N.
XX XX
XX Zhong W, Hong Z, Lau JYN;
XX WPI; 2002-096587/13.
XX
XX Assay system for hepatitis C virus replicase activity comprises RNA
PT template with unstable, small stemloop capable of forming copy-back
PT structure, viral non-structural protein 5B, nucleoside triphosphates,
PT buffer.
XX
XX Example 1; Fig 1B; 10pp; English.
XX
XX The present invention relates to an assay system for hepatitis C virus
CC replicase activity. The assay system comprises an RNA template that
CC has an unstable, small stemloop at the 3' end capable of forming a copy-
CC back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP,
CC and UTP nucleoside triphosphates (NTPs), where one of the NTP is
CC radiolabelled and an assay buffer that supports replication activity of
CC NS5B. The invention also relates to the identification of optimal
CC properties of an RNA template for copy-back self-priming RNA synthesis of
CC HCV. This activity can be used to screen for anti-HCV replicase compounds
CC or to characterise the biological relevance of lead compounds. The
CC optimal RNA templates can be used for developing a system to characterise
CC HCV NS5B polymerase mechanistically and kinetically and for designing
CC small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay
CC system of the invention is useful for detecting HCV replicase activity.
CC The nucleic acid synthesised by NS5B is detected by evaluating an
CC autoradiograph of reaction products separated by gel electrophoresis. The
CC present sequence is RNA template with a stable tetraloop used to direct
CC RNA synthesis by RNA polymerase proteins of HCV, BVDV and poliovirus. This
CC sequence is used in the exemplification of the invention
XX
XX Sequence 40 BP; 29 A; 4 C; 4 G; 0 T; 3 U; 0 Other;
SQ
Query Match 0.4%; Score 14.6; DB 1; Length 40;
Best Local Similarity 69.0%; Pred. No. 2.8e+03;
Matches 20; Conservative 0; Mismatches 9; Indels 0; Gaps 0;
OY 3257 GAAGATATTTTATTCCTTTCCTTTT 3285
DB ||||| ||||| ||||| ||||| |||||
35 GAAGTCCTTTTTCCTTTTTCCTTTT 7
RESULT 1815
ABN73932
ID ABN73932 standard; cDNA; 41 BP.
XX
XX AC ABN73932;
XX
XX 03-JUL-2002 (first entry)
XX
XX DE Bovine embryonic germ (EG) cell cDNA EST 991115a CONTIG 45 #2.
XX
XX KW Bovine; Bos taurus; EST; expressed sequence tag; totipotency;
XX development; gene; ss.
XX
XX OS Bos taurus.
XX
XX PN WO200194550-A2.
XX
XX PD 13-DEC-2001.
XX
XX PF 07-JUN-2001; 2001WO-US018576.
XX
XX PR 07-JUN-2000; 2000US-0209874P.
XX
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PR 06-JUN-2001; 2001US-00876143.
XX
XX (INFI-) INFIGEN INC.
XX
XX Eilertsen KJ, Pfister-Genskow M, Childs L;
XX WPI; 2002-351289/38.
XX
XX An expressed sequence tag (EST), the expression of which, or its
PT complementary sequence, in a cell identifies the cell as a
PT developmentally competent or incompetent cell.
XX
XX Example 16; Page 264; 584pp; English.
XX
XX The present invention describes an expressed sequence tag (EST), where
CC the EST is an isolated, enriched, or purified nucleic acid sequence
CC representing all or part of a gene, the expression of which, or its
CC complementary sequence, in a cell identifies the cell as a
CC developmentally competent or incompetent cell. Molecules which induce
CC totipotency in one or more cells. Molecules which induce developmental
CC incompetence in a cell line are useful for preventing a full term
CC pregnancy in an animal and inhibiting totipotency. The molecules are also
CC useful for treating a disease in an animal by inducing development of one
CC or more cells of the animal into a specific cell type. The present
CC sequence represents a bovine EST which is given in the exemplification of
CC the present invention
XX
XX Sequence 41 BP; 3 A; 4 C; 6 G; 28 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.6; DB 1; Length 41;
Best Local Similarity 69.0%; Pred. No. 2.8e+03;
Matches 20; Conservative 0; Mismatches 9; Indels 0; Gaps 0;
OY 3306 AGCATTTTCTTTTACGAGATTTTATTTT 3334
DB ||||| ||||| ||||| ||||| |||||
6 AGGTTTTTTTTTTTTTTTTTTTTT 34
RESULT 1816
ADH70347/c
ID ADH70347 standard; DNA; 16 BP.
XX
XX AC ADH70347;
XX
XX DT 25-MAR-2004 (first entry)
XX
XX DE Human Vbeta gene repeat sequence #137.
XX
XX KW human; T-cell associated disease; Vbeta; autoimmune disease;
KW degenerative nervous system disease; graft versus host disease;
KW hypersensitivity disease; infectious disease; neoplastic disease;
KW Addison's disease; atrophic gastritis;
KW degenerative nervous system disease; multiple sclerosis;
KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KW allergy; type II hypersensitivity; Goodpasture's syndrome;
KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
KW breast cancer; ds.
XX
XX OS Homo sapiens.
XX
XX PN US2002150891-A1.
XX
XX PD 17-OCT-2002.
XX
XX PF 05-MAR-1999; 99US-00263959.
XX
XX PR 19-SEP-1994; 94US-00309335.
XX
XX PR 19-SEP-1995; 95US-00531241.
XX
```

PA (HOOD/) HOOD L E.
 PA (ROWE/) ROWEN L.
 XX Hood LE, Rowen L;
 XX WPI; 2004-059052/06.
 DR
 XX Kit for diagnosing and treating T-cell associated diseases e.g.
 PT autoimmune, degenerative nervous system and infectious disease, comprises
 PT nucleic acid primers specifically priming and allowing amplification of a
 PT Vbeta gene.
 XX
 PS Disclosure; SEQ ID NO 541; 164pp; English.
 XX
 XX The invention relates to a kit for diagnosing and treating T-cell
 CC associated diseases which comprises a panel of nucleic acid primers
 CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases
 CC including autoimmune diseases, degenerative nervous system diseases,
 CC graft versus host disease, hypersensitivity diseases, infectious diseases
 CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
 CC atrophic gastritis. Degenerative nervous system diseases include multiple
 CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
 CC I hypersensitivities such as contact with allergens that lead to
 CC allergies, Type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by
 CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a Vbeta gene repeat sequence.
 XX
 SQ Sequence 16 BP; 8 A; 1 C; 0 G; 7 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 16;
 Best Local Similarity 93.8%; Pred. No. 1.5e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3463 TATATATATCTATATATA 3478
 DB 16 TATATATATCTATATATA 1
 |||||
 RESULT 1817
 ADH70350
 ID ADH70350 standard; DNA; 16 BP.
 XX
 AC ADH70350;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human Vbeta gene repeat sequence #140.
 DE
 DE human; T-cell associated disease; Vbeta; autoimmune disease;
 KW degenerative nervous system disease; graft versus host disease;
 KW hypersensitivity disease; infectious disease; neoplastic disease;
 KW Addison's disease; atrophic gastritis;
 KW degenerative nervous system disease; multiple sclerosis;
 KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
 KW allergy; type II hypersensitivity; Goodpasture's syndrome;
 KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
 KW HIV; fungal infection; Candida; parasitic infection; schistosome;
 KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
 KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
 KW breast cancer; ds.
 XX
 OS Homo sapiens.
 XX
 XX US2002150891-A1.
 PN
 XX

PD 17-OCT-2002.
 XX
 PF 05-MAR-1999; 99US-00263959.
 XX
 PR 19-SEP-1994; 94US-00309335.
 PR 19-SEP-1995; 95US-00531241.
 XX
 XX (HOOD/) HOOD L E.
 PA (ROWE/) ROWEN L.
 XX
 PI Hood LE, Rowen L;
 XX
 DR WPI; 2004-059052/06.
 XX
 XX Kit for diagnosing and treating T-cell associated diseases e.g.
 PT autoimmune, degenerative nervous system and infectious disease, comprises
 PT nucleic acid primers specifically priming and allowing amplification of a
 PT Vbeta gene.
 XX
 PS Disclosure; SEQ ID NO 544; 164pp; English.
 XX
 XX The invention relates to a kit for diagnosing and treating T-cell
 CC associated diseases which comprises a panel of nucleic acid primers
 CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases
 CC including autoimmune diseases, degenerative nervous system diseases,
 CC graft versus host disease, hypersensitivity diseases, infectious diseases
 CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
 CC atrophic gastritis. Degenerative nervous system diseases include multiple
 CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
 CC I hypersensitivities such as contact with allergens that lead to
 CC allergies, Type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by
 CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a Vbeta gene repeat sequence.
 XX
 SQ Sequence 16 BP; 7 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 16;
 Best Local Similarity 93.8%; Pred. No. 1.5e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3465 TATATATCTATATATA 3480
 DB 1 TATATATCTATATATA 16
 |||||
 RESULT 1818
 AAQ51146
 ID AAQ51146 standard; DNA; 16 BP.
 XX
 AC AAQ51146;
 XX
 DT 27-AUG-2003 (revised)
 DT 25-MAR-2003 (revised)
 DT 02-JUN-1994 (first entry)
 XX
 DE S. cerevisiae telomeric sequence.
 XX
 KW Telomere; budding yeast; eukaryotic; conserved region;
 KW phylogenetic relationship; ss.
 XX
 OS Saccharomyces cerevisiae.
 XX
 XX Key Location/Qualifiers
 FT misc_feature 4
 FT /*tag= a

CC comprises adding a sample containing double-stranded DNA test sequences,
 CC e.g. containing the present sequence, to an aqueous medium containing at
 CC least one complex of anchor DNA, attached to a solid support, and
 CC reporter DNA, where either a part of the anchor DNA or reporter DNA is
 CC designed to form a triple-strand structure with part of the test
 CC sequence. Triplex formation results in displacement of the reporter DNA
 CC which is detected as an indication of the presence of the DNA test
 CC sequence. The method is used to detect DNA sequences, particularly for
 CC identification of bacteria (by detecting genes for ribosomal RNA) in
 CC clinical samples, but also detection of oncogenes and Hepatitis B virus
 XX
 SQ Sequence 16 BP; 8 A; 0 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 16;
 Best Local Similarity 93.8%; Pred. No. 1.5e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 923 TCTTCCTGTCATCCT 938
 Db 16 TCTTCCTGTCATCCT 1

RESULT 1821
 AAZ88875
 ID AAZ88875 standard; DNA; 16 BP.
 AC AAZ88875;
 DT 25-MAY-2000 (first entry)
 DE Single stranded nucleic acid molecule (AT)2.
 XX Free energy parameter; thermodynamics; ss.

OS Synthetic.
 PN US6027884-A.
 XX 22-FEB-2000.
 XX 11-DEC-1996; 96US-00763417.
 XX 17-JUN-1993; 93US-00078759.
 PR 08-APR-1994; 94US-00224840.
 PR 16-JUN-1994; 94US-00260200.

XX (UYNV) UNIV NEW YORK STATE RES FOUND.
 PA Faldasz BD, Benight AS, Lane MJ;
 XX WPI; 2000-194826/17.
 XX Producing double stranded nucleic acid molecules with preselected values
 PT for free energy parameters such as affinity for nucleic acid binding
 PT ligands.

XX Disclosure; Col 69-70; 49pp; English.
 XX This invention describes novel methods of producing double stranded
 CC nucleic acid molecules with a preselected value for a free energy
 CC parameter (e.g. a preselected T_m or a preselected affinity for a nucleic
 CC acid binding ligand). The method involves preparing a first double
 CC stranded nucleic acid comprising a binding site for a nucleic acid-
 CC binding ligand. The first value of a first free energy parameter of the
 CC first double stranded nucleic acid has a preselected relationship with a
 CC first reference value of a first free energy parameter for a reference
 CC double-stranded nucleic acid comprising a reference binding site for the
 CC ligand. The first free energy parameter is a characteristic of the
 CC binding of a ligand of interest to its binding site and the preselected
 CC relationship is higher than, equal to or lower than (sic). The method
 CC comprises: (a) determining a test value for a test double stranded
 CC nucleic acid, comprising a test binding site for the ligand, of a second
 CC free energy parameter that is characteristic of the hybridization of the

CC two complementary strands of double stranded nucleic acid; (b) comparing
 CC the first value to a reference value (second reference value) of the
 CC second free energy parameter for the reference double stranded nucleic
 CC acid; and (c) if the test value and the second reference value of the
 CC second free energy parameter exhibit a test relationship that is the same
 CC as the preselected relationship, then preparing a first double stranded
 CC nucleic acid comprising all or part of the test nucleic acid, but if the
 CC test relationship is different than the preselected relationship,
 CC repeating step (a) and (b) on one or more additional test double stranded
 CC nucleic acids until an additional test double stranded nucleic acid is
 CC identified in which the test relationship is the same as the preselected
 CC relationship, and then preparing a first double stranded nucleic acid
 CC comprising all or part of the additional test nucleic acid. AAZ88875-
 CC 288882 represent the single stranded DNA molecules used to illustrate the
 CC method of the invention

SQ Sequence 16 BP; 7 A; 1 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 16;
 Best Local Similarity 93.8%; Pred. No. 1.5e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3464 ATATATATCTATATAT 3479
 Db 1 ATATATAGCTATATAT 16

RESULT 1822
 AAZ88875/C
 ID AAZ88875 standard; DNA; 16 BP.
 AC AAZ88875;
 DT 25-MAY-2000 (first entry)
 DE Single stranded nucleic acid molecule (AT)2.
 XX Free energy parameter; thermodynamics; ss.

OS Synthetic.
 XX US6027884-A.
 XX 22-FEB-2000.
 XX 11-DEC-1996; 96US-00763417.
 XX 17-JUN-1993; 93US-00078759.
 PR 08-APR-1994; 94US-00224840.
 PR 16-JUN-1994; 94US-00260200.
 XX (UYNV) UNIV NEW YORK STATE RES FOUND.
 PA Faldasz BD, Benight AS, Lane MJ;
 XX WPI; 2000-194826/17.

XX Producing double stranded nucleic acid molecules with preselected values
 PT for free energy parameters such as affinity for nucleic acid binding
 PT ligands.
 XX Disclosure; Col 69-70; 49pp; English.
 XX This invention describes novel methods of producing double stranded
 CC nucleic acid molecules with a preselected value for a free energy
 CC parameter (e.g. a preselected T_m or a preselected affinity for a nucleic
 CC acid binding ligand). The method involves preparing a first double
 CC stranded nucleic acid comprising a binding site for a nucleic acid-
 CC binding ligand. The first value of a first free energy parameter of the
 CC first double stranded nucleic acid has a preselected relationship with a
 CC first reference value of a first free energy parameter for a reference
 CC double-stranded nucleic acid comprising a reference binding site for the
 CC ligand. The first free energy parameter is a characteristic of the

CC binding of a ligand of interest to its binding site and the preselected
 CC relationship is higher than, equal to or lower than (sic). The method
 CC comprises: (a) determining a test value for a test double stranded
 CC nucleic acid, comprising a test binding site for the ligand, of a second
 CC free energy parameter that is characteristic of the hybridization of the
 CC two complementary strands of double stranded nucleic acid; (b) comparing
 CC the first value to a reference value (second reference value) of the
 CC second free energy parameter for the reference double stranded nucleic
 CC acid; and (c) if the test value and the second reference value of the
 CC second free energy parameter exhibit a test relationship that is the same
 CC as the preselected relationship, then preparing a first double stranded
 CC nucleic acid comprising all or part of the test nucleic acid, but if the
 CC test relationship is different than the preselected relationship,
 CC repeating step (a) and (b) on one or more additional test double stranded
 CC nucleic acids until an additional test double stranded nucleic acid is
 CC identified in which the test relationship is the same as the preselected
 CC relationship, and then preparing a first double stranded nucleic acid
 CC comprising all or part of the additional test nucleic acid. AAZ88875-
 CC 288882 represent the single stranded DNA molecules used to illustrate the
 CC method of the invention
 XX
 SQ Sequence 16 BP; 7 A; 1 C; 1 G; 7 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 16;
 Best Local Similarity 93.8%; Pred. No. 1.5e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3464 ATATATATCTATATAT 3479
 DB 16 ATATATAGCTATATAT 1

RESULT 1823
 AAZ98510/C
 ID AAZ98510 standard; DNA; 16 BP.
 AC AAZ98510;
 DT 19-JUN-2000 (first entry)
 XX H. discus derived sequence #28.
 XX Satellite sequence; DNA fragmentation; microsatellite DNA; DNA marker;
 KW Haliotis discus; ss.
 OS Haliotis discus.
 XX WO200011156-A1.
 PN 02-MAR-2000.
 XX 01-JUL-1999; 99WO-JP003551.
 XX 18-AUG-1998; 98JP-00232153.
 XX (NORQ) JAPAN MIN AGRIC FORESTRY & FISHERIES.
 PA Takahashi H, Sekino M;
 PI WPI; 2000-224692/19.
 DR Isolation of satellite sequences from genomic DNA for use as DNA markers
 PT comprises isolating a library with high homogeneity by DNA fragmentation.
 XX Example 5; Page 15; 35pp; Japanese.

XX The invention provides a novel method for isolation of satellite
 CC sequences from genomic DNA that comprises fragmentation of the DNA by a
 CC method which is not dependent on base sequences, then selection of the
 CC satellite sequences from the obtained genomic library of high
 CC homogeneity. The method is useful for the isolation of microsatellite DNA
 CC sequences which can be used as DNA markers. The new method markedly
 CC improves the efficiency of isolation of satellite sequences in comparison

CC to prior art methods which are reliant on base sequences. Sequences
 CC AAZ98483-514 represent sequences from Haliotis discus, used in the method
 CC of the invention
 XX
 SQ Sequence 16 BP; 8 A; 6 C; 2 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 16;
 Best Local Similarity 93.8%; Pred. No. 1.5e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2316 TCTGTGTGTGTGTGTG 2331
 DB 16 TCTGTGTGTGTGTGTG 1

RESULT 1824
 AAZ29601/C
 ID AAZ29601 standard; DNA; 16 BP.
 XX AAZ29601;
 AC AAZ29601;
 DT 10-AUG-2000 (first entry)
 XX Human fibroblast growth factor antisense PCR primer.

DE Hormone dependent cancer; hormone independent cancer; hormonal drug;
 KW prostate cancer; breast cancer; cervical cancer; ovarian cancer;
 KW PCR primer; ss.
 XX Homo sapiens.
 OS WO200020034-A1.
 PN 13-APR-2000.
 XX 07-OCT-1999; 99WO-JP005533.
 XX 08-OCT-1998; 98JP-00286793.
 XX (TAKE) TAKEDA CHEM IND LTD.
 PA Matsutani E, Naito K;
 PI WPI; 2000-303644/26.

XX Hormonal drug-containing agents for retarding conversion of hormone-
 PT dependent cancers into hormone-independent cancers, useful e.g. for
 PT treating prostate and breast cancers.
 XX Example 1; Page 19; 31pp; Japanese.

XX The present invention describes a hormonal drug-containing agent (I) for
 CC retarding the conversion of a hormone-dependent cancer into a hormone-
 CC independent cancer. The agents can be used to treat prostate, breast, the
 CC cervical and ovarian cancers and to make hormonal drugs for retarding the
 CC conversion of a hormone-dependent cancer into a hormone-independent
 CC cancer. The drug can retard the change of hormone-dependent cancers into
 CC hormone-independent cancers effectively. The present sequence represents
 CC a PCR primer which is used in an example from the present invention

XX Sequence 16 BP; 4 A; 5 C; 1 G; 2 T; 0 U; 4 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 16;
 Best Local Similarity 75.0%; Pred. No. 1.5e+03;
 Matches 12; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1798 AGTGACGTCTGTGTCCT 1813
 DB 16 AGYGAVGTGTGTGTCYT 1

RESULT 1825
 AAF24305/C

```

ID  AAF24305 standard; DNA; 16 BP.
XX
AC  AAF24305;
XX
DT  09-APR-2001 (first entry)
XX
DE  Human NFAR-1/NFAR-2 intron/exon junction sequence #5.
XX
DE  Human; nuclear factor associated with dsRNA; NFAR-1, NFAR-2;
KW  transcription regulator; Chromosome 19p13.1-13.2; apoptosis;
KW  tumorigenesis; ds.
XX
OS  Homo sapiens.
XX
PN  WO200077205-A1.
XX
PD  21-DEC-2000.
XX
XX  09-JUN-2000; 2000WO-US015767.
XX
XX  11-JUN-1999; 99US-0138612P.
XX
PA  (BARB/) BARBER G N.
XX  (SAUN/) SAUNDERS L.
PA  (PERK/) PERKINS D J.
XX
PI  Barber GN, Saunders L, Perkins DJ;
XX
DR  WPI; 2001-080688/09.
XX
XX  Novel isolated human nuclear factor associated with dsRNA polypeptide
PT  useful for determining structure-function relationships and as affinity
PT  tag to identify and isolate interacting proteins that bind to the factor.
XX
PS  Disclosure; Page 62; 73pp; English.
XX
XX  The present invention provides the protein and coding sequences of two
CC  human nuclear factors associated with dsRNA (NFAR-1 and NFAR-2). These
CC  are transcriptional regulators and are thought to play a role in
CC  apoptosis and tumorigenesis. The coding sequence found on chromosome
CC  19p13.1-13.2 is useful as a probe to detect rearrangements in tumour
CC  cells and the protein is useful for determining structure-function
XX  relationships
XX
SQ  Sequence 16 BP; 3 A; 2 C; 9 G; 2 T; 0 U; 0 Other;

Query Match      0.4%; Score 14.4; DB 1; Length 16;
Best Local Similarity 93.8%; Pred. No. 1.5e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY  2673 GCCTCCCTCCCTCCAG 2688
DB  16 GCCTCCCTCCCTCCAG 1

RESULT 1826
ABK90419
ID  ABK90419 standard; DNA; 16 BP.
XX
AC  ABK90419;
XX
DT  05-NOV-2002 (first entry)
XX
DE  Human UGT1A1 promoter polymorphism (TA)8 repeat.
XX
KW  Human; ds; UGT1A1; promoter; Gilbert's syndrome; hyperbilirubinaemia;
KW  uridine diphosphate glucuronosyltransferase; Crigler-Najjar syndrome;
KW  UGT; polymorphism detection; TA repeat; glucuronidation; Irinotecan;
KW  TAS-103; xenobiotic.
XX
OS  Homo sapiens.
XX
PN  US6395481-B1.

AAF24305 standard; DNA; 16 BP.
28-MAY-2002.
16-FEB-1999; 99US-00251274.
16-FEB-1999; 99US-00251274.
(ARCH-) ARCH DEV CORP.
Di Rienzo A, Iyer L, Ratain MJ;
WPI; 2002-588597/63.
Detecting polymorphisms in uridine diphosphate glucuronosyltransferase
gene promoter; useful for optimizing drug dosages for a patient,
comprises determining the presence of five thymidine-adenine repeats in
the promoter.
Claim 7; Col 17; 13pp; English.
The invention relates to detecting (M1) polymorphisms in a uridine
diphosphate glucuronosyltransferase (UGT) gene promoter by determining
where the presence of five thymidine-adenine (TA) repeats in the promoter,
expression of the gene. The method is used for detecting polymorphisms in
a UGT gene promoter, preferably a UGT 1 (UGT1A1) gene promoter. (M1) is
useful for screening individuals for variation in glucuronidation
activity, for optimizing drug dosages for a patient, where the drugs
(e.g. Irinotecan or TAS-103) are glucuronidated by UGT (preferably
UGT1A1) and the activity of the drug is effected by its level of
glucuronidation. The method preferably involves obtaining DNA from an
individual, amplifying all or part of a UGT gene promoter (UGT1A1 gene
promoter) contained in the DNA and determining the number of TA repeats
in the promoter. Thus the DNA being amplified comprises all or part of
UGT1A1 promoter. The DNA is amplified by a polymerase chain reaction and
the number of TA repeats is determined by gel electrophoresis or by
sequencing the amplified DNA. The polymorphism comprises an allele
consisting of five TA repeats (TA)5, six TA repeats (TA)6, or seven TA
repeats (TA)7. The promoter has any one of the genotypes (TA)5/(TA)5,
(TA)5/(TA)6, (TA)5/(TA)7, (TA)5/(TA)8, (TA)6/(TA)8, (TA)7/(TA)8 or
(TA)8/(TA)8. (M1) is also useful for predicting an individual's
sensitivity to xenobiotics that are glucuronidated by a UGT (preferably
UGT1A1) gene product, the method comprising determining the number of TA
repeats in a UGT gene promoter, where the number of TA repeats correlates
with expression of the UGT gene, and the individual's sensitivity to
xenobiotics is effected by glucuronidation activity. The methods
preferably involve determining the presence of five, six or seven TA
repeats in the promoter. Defects in glucuronidation is associated with
Crigler's syndrome (hyperbilirubinaemia) and Crigler-Najjar syndrome. The
present sequence is the UGT1A1 promoter (TA)8 repeat

Sequence 16 BP; 8 A; 0 C; 0 G; 8 T; 0 U; 0 Other;

Query Match      0.4%; Score 14.4; DB 1; Length 16;
Best Local Similarity 93.8%; Pred. No. 1.5e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY  2823 TATATATACATATATA 2838
DB  1 TATATATATATATATA 16

RESULT 1827
ABK90419/c
ID  ABK90419 standard; DNA; 16 BP.
XX
AC  ABK90419;
XX
DT  05-NOV-2002 (first entry)
XX
DE  Human UGT1A1 promoter polymorphism (TA)8 repeat.
XX
KW  Human; ds; UGT1A1; promoter; Gilbert's syndrome; hyperbilirubinaemia;

```


XX 01-FEB-2002; 2002US-00061693.
XX PF
XX PR
XX 16-FEB-1999; 99US-00251274.
XX PA
XX (ARCH-) ARCH DEV CORP.
XX PI
XX Rlenzo AD, Iyer L, Ratain MJ;
XX WPI; 2002-740095/80.
XX
XX Detecting polymorphisms in uridine diphosphate glucuronosyltransferase
XX gene promoter, useful for optimizing drug dosages for a patient, involves
XX determining number of thymidine-adenine repeats in the promoter.
XX
XX Claim 7; Page 9; 13pp; English.
XX
XX The invention comprises a method for detecting polymorphisms in a uridine
XX diphosphate glucuronosyltransferase (UGT) gene promoter (preferably
XX UGT1A1). The method involves determining the number of thymidine-adenine
XX (TA) repeats in the promoter - as the number of TA repeats correlates
XX with expression of the UGT gene. The method of the invention is useful
XX for detecting polymorphisms in a UGT gene promoter. The method of the
XX invention is also useful in optimising drug dosages and predicting an
XX individual's sensitivity to xenobiotics for drugs and xenobiotics that
XX are glucuronidated by UGT. The present DNA sequence represents a UGT gene
XX TA repeat polymorphism
XX
XX Sequence 16 BP; 8 A; 0 C; 0 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 16;
Best Local Similarity 93.8%; Pred. No. 1.5e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2823 TATATATACATATATA 2838
DB 16 TATATATATATATATA 1
RESULT 1830
ABX50034
ID ABX50034 standard; DNA; 16 BP.
XX
XX AC
XX ABX50034;
XX
XX 12-FEB-2003 (first entry)
XX
XX Telomere length and/or telomerase activity related polynucleotide #57.
XX
XX Cell proliferation; cell senescence; telomere length;
XX telomerase activity; cell replication; neoplasia; cancer;
XX age-related macular degeneration; Alzheimer's disease; atherosclerosis;
XX telomerase; telomerase inhibitor; immortalised cell; ss.
XX
XX Synthetic.
XX
XX US2002127634-A1.
XX
XX 12-SEP-2002.
XX
XX 05-JUN-1995; 95US-00463404.
XX
XX 13-MAY-1992; 92US-00882438.
XX 24-MAR-1993; 93US-00038766.
XX 13-MAY-1993; 93US-00060952.
XX
XX (WEST/) WEST M D.
XX (SHAY/) SHAY J.
XX (WRIGHT/) WRIGHT W.
XX (BLAC/) BLACKBURN E H.
XX West MD, Shay J, Wright W, Blackburn EH;
XX

DR WPI; 2003-066896/06.
XX
XX Treating condition associated with cell senescence or increased rate of
XX cell proliferation, by administering to cell an agent that derepresses
XX telomerase in the senescing cells or that reduces loss of telomere
XX length.
XX
XX Disclosure; Page 51; 86pp; English.
XX
XX The invention describes a method use for treating increased rate of
XX proliferation of a cell or extending the ability of a cell to replicate,
XX or treating a disease associated with cell senescence. The method
XX comprises administering an agent to reduce loss of telomere length within
XX the cell during proliferation or replication, or to derepress telomerase
XX in the senescing cells. The method is useful for treating a condition
XX associated with an increased rate of proliferation of a cell extending
XX the ability of a cell to replicate, or for treating a disease or
XX condition associated with cell senescence e.g. neoplasia. A second method
XX disclosed in the invention is useful for treating a condition associated
XX with an elevated level of telomerase activity within a cell e.g. cancer.
XX Also disclosed is a method useful for diagnosis of a condition associated
XX with an increased rate of proliferation in a cell in an individual e.g.
XX age-related macular degeneration, astrocytes associated with Alzheimer's
XX disease and endothelial cells associated with atherosclerosis. This
XX sequence represents a polynucleotide used in the study of telomere length
XX and telomerase activity described in the invention
XX
XX Sequence 16 BP; 0 A; 0 C; 9 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 16;
Best Local Similarity 93.8%; Pred. No. 1.5e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2318 TGTGTGTGTGTGTGTG 2333
DB 1 TGGGTGTGTGTGTGTG 16
RESULT 1831
ADC06894
ID ADC06894 standard; DNA; 16 BP.
XX
XX AC
XX ADC06894;
XX
XX 18-DEC-2003 (first entry)
XX
XX Saccharomyces cerevisiae telomere repeat sequence DNA.
XX
XX nanocircle; telomere repeat sequence; cytostatic; ophthalmological;
XX cancer; liver degeneration; macular; skin aging; gene therapy;
XX biomedical research; tissue engineering; transplantation; ds; yeast.
XX
XX Saccharomyces cerevisiae.
XX
XX Key Location/Qualifiers
XX misc_difference 4 /*tag= a
XX /note= "Optionally absent"
XX misc_difference 7..16 /*tag= b
XX /note= "Each TG unit may be optionally absent"
XX
XX WO2003057849-A2.
XX
XX 17-JUL-2003.
XX
XX 03-JAN-2003; 2003WO-US000109.
XX
XX 04-JAN-2002; 2002US-0345056P.
XX
XX (STRD) UNIV STANFORD.
XX
XX Kool ET;
XX

XX WPI; 2003-697275/66.

XX Novel nucleic acid nanocircle comprising at least 2 repeats of a telomere

PT repeat sequence, useful for extending length of telomere in vitro or in

PT vivo, and for treating macular degeneration, and cancer in mammals.

XX

PS Disclosure; Page; 8lpp; English.

XX The invention relates to a novel nucleic acid nanocircle comprising at

CC least two repeats of a telomere repeat sequence. The nanocircle of the

CC invention demonstrates cytostatic and ophthalmological activities and may

CC be useful during the diagnosis and treatment of cancer, liver

CC degeneration, macular degeneration and skin aging, as well as during gene

CC therapy procedures. Furthermore, the nanocircle may be used to extend the

CC lifespan of non-cancerous cell populations in culture, providing enhanced

CC materials for biomedical research, tissue engineering and

CC transplantation. The current sequence is that of the Saccharomyces

CC cerevisiae telomere repeat sequence DNA of the invention. Note: this

CC sequence is not displayed within the specification per se but was created

CC by the indexer.

XX

SQ Sequence 16 BP; 0 A; 0 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 16;

Best Local Similarity 93.8%; Pred. No. 1.5e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2318 TGTGTGTGTGTGTGTG 2333

DB 1 TGGGTGTGTGTGTGTG 16

RESULT 1832

AD63066

ID AAD63066 standard; DNA; 16 BP.

XX

AC AAD63066;

XX

DT 12-FEB-2004 (first entry)

DE Human carboxypeptidase A3 tandem tag DNA #2.

XX

KW Tandem tag; concatenated tag; human; carboxypeptidase A3; ds.

XX

OS Homo sapiens.

XX

PN US2003190618-A1.

XX

PD 09-OCT-2003.

PF 06-MAR-2002; 2002US-00092885.

XX

PR 06-MAR-2002; 2002US-00092885.

XX

PA (SAMA/) SAMAL B.

PA (LIY/) LI Y.

PA (HERM/) HERMIDA L C.

PA (HOPP/) HOPPA N L.

PA (JOHE/) JOHE K K.

XX

PI Samal B, Li Y, Hermida LC, Hoppa NL, Johe KK;

PI WPI; 2003-831617/77.

DR

XX Generating five prime biased tandem tag libraries of cDNAs by isolating a

PT sample of mRNA, amplifying the released tags, concatenating the

PT amplified tags to form concatenated tags, amplifying and isolating the

PT concatenated tags.

XX

PS Disclosure; Page 5; Opp; English.

XX

CC The present invention discloses a method for generating five prime biased

CC tandem tag libraries of cDNAs. The step involves isolating a sample of

CC mRNAs, amplifying the released tags, concatenating the amplified tags to

CC form concatenated tags, amplifying and isolating the concatenated tags.

CC The present sequence is human carboxypeptidase A3 tandem tag DNA

XX

SQ Sequence 16 BP; 0 A; 0 C; 7 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 16;

Best Local Similarity 93.8%; Pred. No. 1.5e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2315 GTCGTGTGTGTGTGTG 2330

DB 1 GTTGTGTGTGTGTGTG 16

RESULT 1833

ADH70346

ID ADH70346 standard; DNA; 16 BP.

XX

AC ADH70346;

XX

DT 25-MAR-2004 (first entry)

DE Human Vbeta gene repeat sequence #136.

XX

KW human; T-cell associated disease; Vbeta; autoimmune disease;

KW degenerative nervous system disease; graft versus host disease;

KW hypersensitivity disease; infectious disease; neoplastic disease;

KW Addison's disease; atrophic gastritis;

KW degenerative nervous system disease; multiple sclerosis;

KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;

KW allergy; type II hypersensitivity; Goodpasture's syndrome;

KW type IV hypersensitivity; leprosy; infectious disease; viral infection;

KW HIV; fungal infection; Candida; parasitic infection; schistosoma;

KW filaria; bacterial infection; Mycobacterium; neoplastic disease;

KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;

KW breast cancer; ds.

XX

OS Homo sapiens.

XX

PN US2002150891-A1.

XX

PD 17-OCT-2002.

PF 05-MAR-1999; 99US-00263959.

XX

PR 19-SEP-1994; 94US-00309335.

PR 19-SEP-1995; 95US-00531241.

XX

PA (HOOD/) HOOD L E.

PA (ROWE/) ROWEN L.

XX

PI Hood LE, Rowen L;

XX

DR WPI; 2004-059052/06.

XX

PT Kit for diagnosing and treating T-cell associated diseases e.g.

PT autoimmune, degenerative nervous system and infectious disease, comprises

PT nucleic acid primers specifically priming and allowing amplification of a

PT Vbeta gene.

XX

PS Disclosure; SEQ ID NO 540; 164pp; English.

XX

CC The invention relates to a kit for diagnosing and treating T-cell

CC associated diseases which comprises a panel of nucleic acid primers

CC specifically priming and allowing amplification of each Vbeta gene,

CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant

CC rejection and diagnosing and treating T-cell associated diseases

CC including autoimmune diseases, degenerative nervous system diseases,

CC graft versus host disease, hypersensitivity diseases, infectious diseases

CC and neoplastic diseases. Autoimmune diseases include Addison's disease,

CC atrophic gastritis. Degenerative nervous system diseases include multiple

CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
 CC I hypersensitivities such as contact with allergens that lead to
 CC allergies, Type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by
 CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a Vbeta gene repeat sequence.
 XX
 SQ Sequence 16 BP; 8 A; 0 C; 0 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 16;
 Best Local Similarity 93.8%; Pred. No. 1.5e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2824 ATATATACATATATAT 2839
 DB 1 ATATATATATATATAT 16
 RESULT 1834
 ADH70346/c
 ID ADH70346 standard; DNA; 16 BP.
 XX AC ADH70346;
 XX DT 25-MAR-2004 (first entry)
 XX DE Human Vbeta gene repeat sequence #136.
 KW human; T-cell associated disease; Vbeta; autoimmune disease;
 KW degenerative nervous system disease; graft versus host disease;
 KW hypersensitivity disease; infectious disease; neoplastic disease;
 KW Addison's disease; atrophic gastritis;
 KW degenerative nervous system disease; multiple sclerosis;
 KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
 KW allergy; type II hypersensitivity; Goodpasture's syndrome;
 KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
 KW HIV; fungal infection; Candida; parasitic infection; schistosome;
 KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
 KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
 KW breast cancer; ds.
 XX OS Homo sapiens.
 XX US2002150891-A1.
 XX PD 17-OCT-2002.
 XX PF 05-MAR-1999; 99US-00263959.
 XX PR 19-SEP-1994; 94US-00309335.
 XX PR 19-SEP-1995; 95US-00531241.
 XX PA (HOOD/) HOOD L E.
 XX PA (ROWE/) ROWEN L.
 XX PI Hood LE, Rowen L;
 XX DR WPI; 2004-059052/06.
 XX PT Kit for diagnosing and treating T-cell associated diseases e.g.
 XX autoimmune, degenerative nervous system and infectious disease, comprises
 XX nucleic acid primers specifically priming and allowing amplification of a
 XX Vbeta gene.
 XX PS Disclosure; SEQ ID NO 540; 164pp; English.
 XX CC The invention relates to a kit for diagnosing and treating T-cell
 CC associated diseases which comprises a panel of nucleic acid primers

CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases
 CC including autoimmune diseases, degenerative nervous system diseases
 CC graft versus host disease, hypersensitivity diseases, infectious diseases
 CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
 CC atrophic gastritis. Degenerative nervous system diseases include multiple
 CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
 CC I hypersensitivities such as contact with allergens that lead to
 CC allergies, Type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by
 CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a Vbeta gene repeat sequence.
 XX
 SQ Sequence 16 BP; 8 A; 0 C; 0 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 16;
 Best Local Similarity 93.8%; Pred. No. 1.5e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2824 ATATATACATATATAT 2839
 DB 16 ATATATATATATATAT 1
 RESULT 1835
 ADH23257/c
 ID ADH23257 standard; DNA; 16 BP.
 XX AC ADH23257;
 XX DT 25-MAR-2004 (first entry)
 XX DE Degenerate antisense PCR primer used to amplify the PDGF receptor.
 KW hormone dependent cancer; hormone; differentiation inducing agent;
 KW luteinising hormone-releasing hormone; LH-RH; fat soluble vitamin;
 KW prostate; ovarian; uterine; breast cancer; hormone independent cancer;
 KW anti-tumour; PCR; primer; ss; PDGF receptor.
 XX OS Synthetic.
 XX OS Unidentified.
 XX PN JP2004002240-A.
 XX PD 08-JAN-2004.
 XX PF 31-MAY-2002; 2002JP-00160837.
 XX PR 31-MAY-2002; 2002JP-00160837.
 XX PA (TAKE) TAKEDA CHEM IND LTD.
 XX XX WPI; 2004-113108/12.
 XX PT Novel therapeutic agent of hormone dependent cancer, comprising hormone
 XX group, chemical agent and differentiation inducing agent, useful for
 XX treating hormone dependent cancer in mammal.
 XX PS Example 1; Page 14; 15pp; Japanese.
 XX CC This invention relates to a novel therapeutic agent for the treatment of
 CC hormone dependent cancer that comprises a hormone group chemical agent
 CC and a differentiation inducing agent. Specifically, the hormone group
 CC chemical agent refers to an agonist derived from the luteinising hormone-
 CC releasing hormone (LH-RH), whereas the differentiation inducing agent is
 CC preferably a fat soluble vitamin, or can be a nuclear receptor ligand,
 CC histone acetylation regulation drug or a DNA methylation regulation drug.

CC The present invention describes using the LH-RH agonist as a preventative
 CC or therapeutic agent for hormone dependent prostate, ovarian, uterine or
 CC breast cancer, and can also delay change in hormone independent cancer.
 CC Accordingly, the compositions of the invention are described as
 CC exhibiting high anti-tumour activity. This oligonucleotide sequence is a
 CC degenerate PCR primer used to amplify the platelet-derived growth factor
 CC (PDGF) receptor, in an exemplification of the invention.

XX Sequence 16 BP; 4 A; 5 C; 1 G; 2 T; 0 U; 4 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 16;
 Best Local Similarity 75.0%; Pred. No. 1.5e+03;
 Matches 12; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 1798 AGTGACGCTGTGTCCT 1813

Db ||:||||:||||:
 16 AGYGAGTGTGTCCT 1

RESULT 1836

AAT53487

ID AAT53487 standard; RNA; 17 BP.

XX AAT53487;

AC AAT53487;

DT 25-MAR-2003 (revised)

DT 27-MAR-1997 (first entry)

XX Rat ICAM hammerhead ribozyme target sequence (nt. position 293).

KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
 KW Gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
 KW Interleukin-5; IL-5; ICAM-1;
 KW Interleukin-5; IL-5; ICAM-1;
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
 KW Translocation; chronic myelogenous leukaemia; CML; cancer;
 KW Philadelphia chromosome; inflammation; autoimmune disease;
 KW atherosclerosis; myocardial infarction; stroke; restenosis;
 KW transplant rejection; rheumatoid arthritis; psoriasis;
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
 KW ss.

XX Rattus rattus.

OS Rattus rattus.

XX AAT53805

PN WO9523225-A2.

XX 31-AUG-1995.

PD 31-AUG-1995.

XX 23-FEB-1995;

PF 95WO-IB000156.

XX 23-FEB-1994;

PR 94US-00201109.

PR 29-MAR-1994;

PR 94US-00218934.

PR 04-APR-1994;

PR 94US-00222795.

PR 07-APR-1994;

PR 94US-00224483.

PR 15-APR-1994;

PR 94US-00227958.

PR 15-APR-1994;

PR 94US-00228041.

PR 18-MAY-1994;

PR 94US-00245736.

PR 06-JUL-1994;

PR 94US-00271280.

PR 15-AUG-1994;

PR 94US-00291932.

PR 16-AUG-1994;

PR 94US-00291433.

PR 17-AUG-1994;

PR 94US-00292620.

PR 19-AUG-1994;

PR 94US-00293520.

PR 02-SEP-1994;

PR 94US-00300000.

PR 08-SEP-1994;

PR 94US-00303039.

PR 23-SEP-1994;

PR 94US-00311486.

PR 23-SEP-1994;

PR 94US-00311749.

PR 28-SEP-1994;

PR 94US-00314397.

PR 03-OCT-1994;

PR 94US-00316771.

PR 07-OCT-1994;

PR 94US-00319492.

PR 11-OCT-1994;

PR 94US-00321993.

PR 04-NOV-1994;

PR 94US-00334847.

PR 10-NOV-1994;

PR 94US-00337608.

PR 28-NOV-1994;

PR 94US-00345516.

PR 16-DEC-1994;

PR 94US-00357577.

PR 23-DEC-1994;

PR 94US-00363233.

PR 30-JAN-1995;

PR 95US-00380734.

XX (RIBO-) RIBOZYME PHARM INC.

XX Stinchcomb DT, Chowira B, Drenzo A, Draper KG, Dudycz LW;

PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;

PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;

PI Tracz D, Usman N, Wincott FE, Woolf T;

XX WPI; 1995-351090/45.

DR Ribozymes having modified bases and methods for producing them - for use

XX in inhibiting disease related genes.

PT Claim 2; Page 201; 407pp; English.

PS The present sequence represents a preferred target sequence for an

XX enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the

CC nucleotide base position indicated in the DE line. Regions of the mRNA

CC that do not form secondary folding structures and that contain potential

CC hammerhead and hairpin ribozyme cleavage sites were identified by

CC computer analysis. Ribozymes directed against these mRNA sequences were

CC designed and synthesised with modifications that improve their nuclease

CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby

CC inhibit ICAM-1 expression, making them useful for reducing transplant

CC rejection and alleviating symptoms in patients with rheumatoid arthritis,

CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to

CC correct PI field.)

XX Sequence 17 BP; 5 A; 4 C; 4 G; 0 T; 4 U; 0 Other;

SQ Query Match 0.4%; Score 14.4; DB 1; Length 17;

Best Local Similarity 68.8%; Pred. No. 1.6e+03;

Matches 11; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1878 GGAGCTCTTCAAGCTG 1893

Db ||:||||:||||:
 1 GAAGCUCUCUCAAAGCUG 16

RESULT 1837

AAT53805

ID AAT53805 standard; RNA; 17 BP.

XX AAT53805;

AC AAT53805;

XX 25-MAR-2003 (revised)

DT 03-APR-1997 (first entry)

XX Rat ICAM hammerhead ribozyme target sequence (nt. position 2977).

DE Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;

XX Gene expression; downregulation; interleukin-5; IL-5; ICAM-1;

XX Interleukin-5; IL-5; ICAM-1;

XX Interleukin-5; IL-5; ICAM-1;

XX TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;

XX Translocation; chronic myelogenous leukaemia; CML; cancer;

XX Philadelphia chromosome; inflammation; autoimmune disease;

XX atherosclerosis; myocardial infarction; stroke; restenosis;

XX transplant rejection; rheumatoid arthritis; psoriasis;

XX myocardial ischaemia; Kawasaki disease; septic shock; HIV;

XX human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;

XX ss.

XX Rattus rattus.

OS Rattus rattus.

XX WO9523225-A2.

XX 31-AUG-1995.

PD 31-AUG-1995.

XX 23-FEB-1995;

PF 95WO-IB000156.

PR 23-FEB-1994; 94US-00201109.
 PR 29-MAR-1994; 94US-00218934.
 PR 04-APR-1994; 94US-00222795.
 PR 07-APR-1994; 94US-00224483.
 PR 15-APR-1994; 94US-00227958.
 PR 15-APR-1994; 94US-00228041.
 PR 18-MAY-1994; 94US-00245736.
 PR 06-JUL-1994; 94US-00271280.
 PR 15-AUG-1994; 94US-00291932.
 PR 16-AUG-1994; 94US-00291433.
 PR 17-AUG-1994; 94US-00292620.
 PR 19-AUG-1994; 94US-00293520.
 PR 02-SEP-1994; 94US-00300000.
 PR 08-SEP-1994; 94US-00303039.
 PR 23-SEP-1994; 94US-00311486.
 PR 23-SEP-1994; 94US-00311749.
 PR 28-SEP-1994; 94US-00314397.
 PR 03-OCT-1994; 94US-00316771.
 PR 07-OCT-1994; 94US-00319492.
 PR 11-OCT-1994; 94US-00321993.
 PR 04-NOV-1994; 94US-00334847.
 PR 10-NOV-1994; 94US-00337608.
 PR 28-NOV-1994; 94US-00345516.
 PR 16-DEC-1994; 94US-00357577.
 PR 23-DEC-1994; 94US-00363233.
 PR 30-JAN-1995; 95US-00380734.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
 PI Grimm S, Karpisky A, Kislich K, Matulic-Adamic J, Mcswiggen JA;
 PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
 PI Tracz D, Usman N, Wincott FE, Woolf T;
 XX WPI; 1995-351090/45.
 DR Ribozymes having modified bases and methods for producing them - for use
 XX in inhibiting disease related genes.
 PT Claim 2; Page 204; 407pp; English.
 PS The present sequence represents a preferred target sequence for an
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
 CC nucleotide base position indicated in the DE line. Regions of the mRNA
 CC that do not form secondary folding structures and that contain potential
 CC hammerhead and hairpin ribozyme cleavage sites were identified by
 CC computer analysis. Ribozymes directed against these mRNA sequences were
 CC designed and synthesised with modifications that improve their nuclease
 CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
 CC inhibit ICAM-1 expression, making them useful for reducing transplant
 CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
 CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
 CC correct PI field.)
 XX
 SQ Sequence 17 BP; 5 A; 4 C; 4 G; 0 T; 4 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 68.8%; Pred. No. 1.6e+03;
 Matches 11; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
 QY 1878 GGAGCTCTTCAAGCTG 1893
 Db 1 GAAGCUCUCCAGCUG 16
 |||:|||||:
 RESULT 1838
 AAT81557/c
 ID AAT81557 standard; RNA; 17 BP.
 XX AAT81557;
 AC
 XX
 XX 14-DEC-1997 (first entry)
 DT
 XX

DE Human c-myb hammerhead ribozyme target sequence (nt. position 2894).
 XX Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
 KW smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
 KW coronary angioplasty; ss.
 XX Homo sapiens.
 XX WO9531541-A2.
 PN 23-NOV-1995.
 PD 18-MAY-1995; 95WO-US006368.
 PF 18-MAY-1994; 94US-00245466.
 PR 13-JAN-1995; 95US-00373124.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA Stinchcomb DT, Draper K, Mcswiggen J, Jarvis T;
 PI WPI; 1996-010927/01.
 DR New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
 PT for treating restenosis or cancer.
 PT Claim 1; Page 78; 128pp; English.
 PS The present sequence represents the preferred target sequence for an
 CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
 CC the human c-myb sequence at the base position indicated in the descriptor
 CC line. The c-myb sequence was screened for optimal ribozyme target sites
 CC using a computer folding algorithm, and regions of the mRNA which did not
 CC form secondary folding structures and contained potential ribozyme
 CC cleavage sites were identified. Ribozymes were synthesised and their
 CC activities optimised by either varying the length of the binding arms or
 CC by modification to prevent degradation by nucleases. The ribozymes cleave
 CC the c-myb sequence and can be used to prevent smooth muscle cell
 CC hyperproliferation in restenosis, especially after coronary angioplasty,
 CC and in cancers
 XX
 SQ Sequence 17 BP; 8 A; 0 C; 0 G; 0 T; 9 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2833 TATATATATATAACAT 2848
 Db 17 TATATATATATAAAT 2
 |||:|||||:
 RESULT 1839
 AAX73033
 ID AAX73033 standard; RNA; 17 BP.
 XX AAX73033;
 AC AAX73033;
 XX 28-JUL-1999 (first entry)
 DT
 XX
 DE Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #466.
 XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KW foetal liver kinase 1; ss.
 XX Mus sp.
 OS
 XX WO9715662-A2.
 PN
 XX 01-MAY-1997.
 PD

XX 25-OCT-1996; 96WO-US017480.
 XX 26-OCT-1995; 95US-0005974P.
 PR 11-JAN-1996; 96US-00584040.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (CHIR) CHIRON CORP.
 XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
 XX WPI; 1997-259017/23.
 XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.
 XX Claim 4; Page 137; 219pp; English.
 XX The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient
 CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention
 XX Sequence 17 BP; 5 A; 3 C; 6 G; 0 T; 3 U; 0 Other;
 SQ Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 81.2%; Pred. No. 1.6e+03;
 Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 ||||| : |||||
 QY 1608 GAAGTGATCCACAGG 1623
 Db 2 GAAGUGAUCCACAGG 17
 RESULT 1840
 AAV09832
 ID AAV09832 standard; DNA; 17 BP.
 AC AAV09832;
 XX 11-JUN-1998 (first entry)
 XX Plasmid pTZ18R derived oligomer chip #9.
 XX Parallel synthesis; oligomer chip; hybridisation; biopolymer; ss.
 OS Synthetic.
 XX WO9749714-A1.
 XX 31-DEC-1997.
 XX 24-JUN-1997; 97WO-DE001332.
 XX 25-JUN-1996; 96DE-01025397.
 XX (DEKR-) DEUT KREBSFORSCHUNGSZENTRUM.
 XX Weiler J, Hoheisel J;
 XX WPI; 1998-077103/07.
 XX Parallel automated synthesis of oligo:nucleotide(s) on alkylamino-
 PT modified support - particularly for producing oligomer chips for use in
 PT hybridisation experiments or as source of high quality bio:polymer(s).
 XX Example; Fig 5C; 26pp; German.
 XX Oligonucleotides AAV09824-V09844 are used to explain a novel method for
 CC the parallel automated synthesis of oligonucleotides on an alkylamino-
 CC modified matrix surface. This method involves applying 3-succinate
 CC derivatives of protected nucleosides to the matrix surface. The oligomer
 CC chips produced this way are used in hybridisation experiments and as
 CC source of high quality biopolymers (for polymerase chain reaction, as
 CC sequencing, or as probes). The method allows the simple production of a
 CC wide range of different oligonucleotides
 XX Sequence 17 BP; 2 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 ||||| : |||||
 QY 3651 CTTGCTTGCTGCAGG 3666
 Db 2 CTTGATGCTGCAGG 17
 RESULT 1841
 AAV09835
 ID AAV09835 standard; DNA; 17 BP.
 AC AAV09835;
 XX 11-JUN-1998 (first entry)
 XX Plasmid pTZ18R derived oligomer chip #12.
 XX Parallel synthesis; oligomer chip; hybridisation; biopolymer; ss.
 OS Synthetic.
 XX WO9749714-A1.
 XX 31-DEC-1997.
 XX 24-JUN-1997; 97WO-DE001332.
 XX 25-JUN-1996; 96DE-01025397.
 XX (DEKR-) DEUT KREBSFORSCHUNGSZENTRUM.
 XX Weiler J, Hoheisel J;
 XX WPI; 1998-077103/07.
 XX Parallel automated synthesis of oligo:nucleotide(s) on alkylamino-
 PT modified support - particularly for producing oligomer chips for use in
 PT hybridisation experiments or as source of high quality bio:polymer(s).
 XX Example; Fig 5C; 26pp; German.
 XX Oligonucleotides AAV09824-V09844 are used to explain a novel method for
 CC the parallel automated synthesis of oligonucleotides on an alkylamino-
 CC modified matrix surface. This method involves applying 3-succinate
 CC derivatives of protected nucleosides to the matrix surface. The oligomer
 CC chips produced this way are used in hybridisation experiments and as
 CC source of high quality biopolymers (for polymerase chain reaction, as
 CC sequencing, or as probes). The method allows the simple production of a
 CC wide range of different oligonucleotides
 XX Sequence 17 BP; 2 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 ||||| : |||||
 QY 3651 CTTGCTTGCTGCAGG 3666

PS Example; Fig 5C; 26pp; German.
 XX Oligonucleotides AAV09824-V09844 are used to explain a novel method for
 CC the parallel automated synthesis of oligonucleotides on an alkylamino-
 CC modified matrix surface. This method involves applying 3-succinate
 CC derivatives of protected nucleosides to the matrix surface. The oligomer
 CC chips produced this way are used in hybridisation experiments and as
 CC source of high quality biopolymers (for polymerase chain reaction, as
 CC sequencing, or as probes). The method allows the simple production of a
 CC wide range of different oligonucleotides
 XX Sequence 17 BP; 2 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 ||||| : |||||
 QY 3651 CTTGCTTGCTGCAGG 3666
 Db 2 CTTGATGCTGCAGG 17
 RESULT 1841
 AAV09835
 ID AAV09835 standard; DNA; 17 BP.
 AC AAV09835;
 XX 11-JUN-1998 (first entry)
 XX Plasmid pTZ18R derived oligomer chip #12.
 XX Parallel synthesis; oligomer chip; hybridisation; biopolymer; ss.
 OS Synthetic.
 XX WO9749714-A1.
 XX 31-DEC-1997.
 XX 24-JUN-1997; 97WO-DE001332.
 XX 25-JUN-1996; 96DE-01025397.
 XX (DEKR-) DEUT KREBSFORSCHUNGSZENTRUM.
 XX Weiler J, Hoheisel J;
 XX WPI; 1998-077103/07.
 XX Parallel automated synthesis of oligo:nucleotide(s) on alkylamino-
 PT modified support - particularly for producing oligomer chips for use in
 PT hybridisation experiments or as source of high quality bio:polymer(s).
 XX Example; Fig 5C; 26pp; German.
 XX Oligonucleotides AAV09824-V09844 are used to explain a novel method for
 CC the parallel automated synthesis of oligonucleotides on an alkylamino-
 CC modified matrix surface. This method involves applying 3-succinate
 CC derivatives of protected nucleosides to the matrix surface. The oligomer
 CC chips produced this way are used in hybridisation experiments and as
 CC source of high quality biopolymers (for polymerase chain reaction, as
 CC sequencing, or as probes). The method allows the simple production of a
 CC wide range of different oligonucleotides
 XX Sequence 17 BP; 2 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 ||||| : |||||
 QY 3651 CTTGCTTGCTGCAGG 3666

Db 2 CTTGCATGCTGCAGG 17

RESULT 1842

ABK03424

ID ABK03424 standard; RNA; 17 BP.

XX

AC ABK03424;

XX

DT 12-MAR-2002 (first entry)

XX

DE Human CD20 G-cleaver #39.

XX

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; neurotropic; neuroprotective; antiparkinsonian; musclar; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNazyme; inozyme; G-cleaver; amberyne; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytooma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

OS Homo sapiens.

OS Synthetic.

XX

PN WO200159103-A2.

XX

PD 16-AUG-2001.

XX

PF 09-FEB-2001; 2001WO-US004273.

XX

PR 11-FEB-2000; 2000US-0181797P.

PR 28-FEB-2000; 2000US-0185516P.

PR 06-MAR-2000; 2000US-0187128P.

XX

PA (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J.

PA (CHOW/) CHOWRIRA B M.

XX

PI Blatt L, Mcswiggen J, Chowrira BM;

XX

WPI; 2001-607195/69.

DR

XX

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

PT

XX

Claim 30; Page 152; 200pp; English.

PS

XX

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberyne (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with a XY motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg^{2+} . Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytooma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-

CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably Mg^{2+} . Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease CC states which respond to the modulation of NOGO expression. The present CC sequence is a G-cleaver molecule of the invention

XX

SQ Sequence 17 BP; 6 A; 5 C; 3 G; 0 T; 3 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 17;

Best Local Similarity 75.0%; Pred. No. 1.6e-03;

Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 3754 CAGCGACGACCTTTC 3769

Db |||||

2 CAGAGACGACUUC 17

RESULT 1843

ABK01807

ID ABK01807 standard; RNA; 17 BP.

XX

AC ABK01807;

XX

DT 12-MAR-2002 (first entry)

XX

DE Human NOGO Zinzyme #129.

XX

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; neurotropic; neuroprotective; antiparkinsonian; musclar; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNazyme; inozyme; G-cleaver; amberyne; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytooma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

XX

OS Homo sapiens.

OS Synthetic.

XX

PN WO200159103-A2.

XX

PD 16-AUG-2001.

XX

PF 09-FEB-2001; 2001WO-US004273.

XX

PR 11-FEB-2000; 2000US-0181797P.

PR 28-FEB-2000; 2000US-0185516P.

PR 06-MAR-2000; 2000US-0187128P.

XX

PA (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J.

PA (CHOW/) CHOWRIRA B M.

XX

PI Blatt L, Mcswiggen J, Chowrira BM;

XX

WPI; 2001-607195/69.

DR

XX

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and

PT central nervous system injury.
 PS Claim 88; Page 98; 200pp; English.
 XX
 CC The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA motif) or
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
 CC an amberzyme (cleaving RNA with an NGN triplet), a zynzyme (cleaving RNA
 CC with a VXY motif). The CD20-targeting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
 CC immune thrombocytopenia, and inflammatory arthropathy. The NGO-
 CC targeting nucleic acid is used to cleave RNA of the NGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NGO. The treatment may further comprise the use of one or more
 CC therapies. In particular, the NGO-targeting nucleic acid may be used to
 CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NGO expression. The present
 CC sequence is a zynzyme molecule of the invention
 XX
 SQ Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 75.0%; Pred. No. 1.6e+03;
 Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 501 GCTGGACGCTGCGAG 516
 ||||| |||||
 Db 2 GCUGGAGGUGGUGGAG 17
 RESULT 1844
 ABL46749
 ID ABL46749 standard; RNA; 17 BP.
 XX
 AC ABL46749;
 XX
 DT 27-JUN-2003 (first entry)
 DE Human GRID NCH ribozyme substrate oligonucleotide #203.
 XX
 DE Human; Grb2-related with Insert Domain; GRID; T-cell;
 KW co-stimulatory adaptor protein; tissue rejection; graft rejection;
 KW leukaemia; cytostatic; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200162911-A2.
 XX
 PD 30-AUG-2001.
 XX
 PF 23-FEB-2001; 2001WO-US005957.
 XX
 PR 24-FEB-2000; 2000US-0184594P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 (GLAX) GLAXO GROUP LTD.
 PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;
 WPI; 2001-550088/61.
 PT New nucleic acid(s) for regulating the Grb2-related with Insert Domain
 (GRID) gene comprises using antisense and enzymatic nucleic acid
 PT molecules such as hammerhead ribozymes.
 XX
 PS Claim 4; Page 66; 108pp; English.
 CC The present invention relates to oligonucleotides that downregulate the
 CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
 CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
 CC for modulating the expression of GRID, to treat conditions such as
 CC tissue/graft rejection and leukaemia. The oligonucleotides can also be
 CC administered in conjunction with other therapies such as radiation,
 CC chemotherapy and cyclosporin treatment. The present oligonucleotide was
 CC used to illustrate the invention
 XX
 SQ Sequence 17 BP; 3 A; 8 C; 5 G; 0 T; 1 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 1.6e+03;
 Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 45 GCCCAGCGCTGCGAG 60
 ||||| |||||
 Db 1 GCCCAGCGCTGCGAG 16
 RESULT 1845
 ABL47247
 ID ABL47247 standard; RNA; 17 BP.
 XX
 AC ABL47247;
 XX
 DT 27-JUN-2003 (first entry)
 DE Human GRID Amberzyme substrate oligonucleotide #147.
 XX
 DE Human; Grb2-related with Insert Domain; GRID; T-cell;
 KW co-stimulatory adaptor protein; tissue rejection; graft rejection;
 KW leukaemia; cytostatic; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200162911-A2.
 XX
 PD 30-AUG-2001.
 XX
 PF 23-FEB-2001; 2001WO-US005957.
 XX
 PR 24-FEB-2000; 2000US-0184594P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 (GLAX) GLAXO GROUP LTD.
 PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;
 WPI; 2001-550088/61.
 PT New nucleic acid(s) for regulating the Grb2-related with Insert Domain
 (GRID) gene comprises using antisense and enzymatic nucleic acid
 PT molecules such as hammerhead ribozymes.
 XX
 PS Claim 4; Page 88; 108pp; English.
 CC The present invention relates to oligonucleotides that downregulate the
 CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
 CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
 CC for modulating the expression of GRID, to treat conditions such as
 CC tissue/graft rejection and leukaemia. The oligonucleotides can also be

XX Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;
 PI WPI; 2001-550088/61.
 XX
 DR New nucleic acid(s) for regulating the Grb2-related with Insert Domain
 PT (GRID) gene comprises using antisense and enzymatic nucleic acid
 PT molecules such as hammerhead ribozymes.
 XX
 PS Claim 4; Page 66; 108pp; English.
 XX
 CC The present invention relates to oligonucleotides that downregulate the
 CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
 CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
 CC for modulating the expression of GRID, to treat conditions such as
 CC tissue/graft rejection and leukaemia. The oligonucleotides can also be
 CC administered in conjunction with other therapies such as radiation,
 CC chemotherapy and cyclosporin treatment. The present oligonucleotide was
 CC used to illustrate the invention
 XX
 SQ Sequence 17 BP; 3 A; 8 C; 5 G; 0 T; 1 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 1.6e+03;
 Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 45 GCCCAGCGCTGCGAG 60
 ||||| |||||
 Db 1 GCCCAGCGCTGCGAG 16
 RESULT 1845
 ABL47247
 ID ABL47247 standard; RNA; 17 BP.
 XX
 AC ABL47247;
 XX
 DT 27-JUN-2003 (first entry)
 DE Human GRID Amberzyme substrate oligonucleotide #147.
 XX
 DE Human; Grb2-related with Insert Domain; GRID; T-cell;
 KW co-stimulatory adaptor protein; tissue rejection; graft rejection;
 KW leukaemia; cytostatic; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200162911-A2.
 XX
 PD 30-AUG-2001.
 XX
 PF 23-FEB-2001; 2001WO-US005957.
 XX
 PR 24-FEB-2000; 2000US-0184594P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 (GLAX) GLAXO GROUP LTD.
 PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;
 WPI; 2001-550088/61.
 PT New nucleic acid(s) for regulating the Grb2-related with Insert Domain
 (GRID) gene comprises using antisense and enzymatic nucleic acid
 PT molecules such as hammerhead ribozymes.
 XX
 PS Claim 4; Page 88; 108pp; English.
 CC The present invention relates to oligonucleotides that downregulate the
 CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
 CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
 CC for modulating the expression of GRID, to treat conditions such as
 CC tissue/graft rejection and leukaemia. The oligonucleotides can also be

CC administered in conjunction with other therapies such as radiation,
 CC chemotherapy and cyclosporin treatment. The present oligonucleotide was
 CC used to illustrate the invention

XX Sequence 17 BP; 2 A; 2 C; 9 G; 0 T; 4 U; 0 Other;
 SQ Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 75.0%; Pred. No. 1.6e+03;
 Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 2006 TGGTGGAGGACCTGGA 2021
 Db :||:||||| ||:|||||
 2 UGGUGGAGGUCCUGGA 17

RESULT 1846
 ABL47012
 ID ABL47012 standard; RNA; 17 BP.
 XX AC ABL47012;
 XX XX
 XX 27-JUN-2003 (first entry)
 XX Human GRID zinzyme substrate oligonucleotide #96.
 XX Human; Grb2-related with Insert Domain; GRID; T-cell;
 KW co-stimulatory adaptor protein; tissue rejection; graft rejection;
 KW leukaemia; cytostatic; ss.
 XX Homo sapiens.
 OS WO200162911-A2.
 PN 30-AUG-2001.
 XX 23-FEB-2001; 2001WO-US005957.
 XX 24-FEB-2000; 2000US-0184594P.
 PR (RIBO-) RIBOZYME PHARM INC.
 PA (GLAX) GLAXO GROUP LTD.
 XX Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;
 XX WPI; 2001-550088/61.
 XX New nucleic acid(s) for regulating the Grb2-related with Insert Domain
 PT (GRID) gene comprises using antisense and enzymatic nucleic acid
 PT molecules such as hammerhead ribozymes.
 XX Claim 4; Page 73; 108pp; English.

XX The present invention relates to oligonucleotides that downregulate the
 CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
 CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
 CC for modulating the expression of GRID, to treat conditions such as
 CC tissue/graft rejection and leukaemia. The oligonucleotides can also be
 CC administered in conjunction with other therapies such as radiation,
 CC chemotherapy and cyclosporin treatment. The present oligonucleotide was
 CC used to illustrate the invention
 XX Sequence 17 BP; 2 A; 2 C; 8 G; 0 T; 5 U; 0 Other;
 SQ Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 75.0%; Pred. No. 1.6e+03;
 Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2006 TGGTGGAGGACCTGGA 2021
 Db :||:||||| ||:|||||
 1 UGGUGGAGGUCCUGGA 16
 RESULT 1847

AAH91733
 ID AAH91733 standard; DNA; 17 BP.
 XX AAH91733;
 XX 09-OCT-2001 (first entry)
 XX Human inflammatory bowel disease associated polymorphic site #808.
 XX Human; inflammatory bowel disease; Crohn's disease; ulcerative colitis;
 KW single nucleotide polymorphism; SNP; chromosome 19p13; paternity test;
 KW chromosome 5q31-33; forensic test; gene therapy; ds.
 XX Homo sapiens.

XX Key Location/Qualifiers
 FT misc_feature 8
 FT /tag= a
 FT /note= "SNP, optionally T or A at this position"
 XX WO200142511-A2.
 XX 14-JUN-2001.
 XX 11-DEC-2000; 2000WO-US033632.
 XX 10-DEC-1999; 99US-0170257P.
 XX 10-APR-2000; 2000US-0196046P.
 XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
 XX (ELLI-) ELLIPSIS BIOTHERAPEUTICS CORP.
 XX Daly M, Hudson TJ, Lander ES, Rioux J, Siminovitch K;
 XX WPI; 2001-367874/38.
 XX Testing for the presence of polymorphisms associated with inflammatory
 PT bowel disease, using a hybridization assay.
 XX Claim 1; Page 73; 463pp; English.

XX The present invention describes a method for detecting the presence of
 CC polymorphisms associated with inflammatory bowel diseases such as
 CC ulcerative colitis and Crohn's disease. The methods can be used to detect
 CC the presence of genetic polymorphisms associated with inflammatory bowel
 CC disease and correlating their occurrence with disease states. They may be
 CC used in this way for phenotypic correlations, forensics, paternity
 CC testing, medicine and genetic analysis. The present sequence is a
 CC polymorphic site described in the exemplification of the invention
 XX Sequence 17 BP; 4 A; 3 C; 5 G; 4 T; 0 U; 1 Other;

XX Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1165 AAATGGGAGCTGTCTCG 1181
 Db :||||| |||||||
 1 AAATGGGAGCTGTCTCG 17

RESULT 1848
 AEN08005
 ID AEN08005 standard; DNA; 17 BP.
 XX AEN08005;
 XX 29-MAY-2002 (first entry)
 XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7997.
 XX Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;

skeletal muscle disorder; amplicon; screening; ss.

Homo sapiens.
WO200192524-A2.

06-DEC-2001.

25-MAY-2001; 2001WO-US016981.

26-MAY-2000; 2000US-0207456P.

21-SEP-2000; 2000US-0234587P.

27-SEP-2000; 2000US-0236359P.

04-OCT-2000; 2000GB-00024263.

30-JAN-2001; 2001WO-US000661.

30-JAN-2001; 2001WO-US000662.

30-JAN-2001; 2001WO-US000663.

30-JAN-2001; 2001WO-US000664.

30-JAN-2001; 2001WO-US000665.

30-JAN-2001; 2001WO-US000666.

30-JAN-2001; 2001WO-US000667.

30-JAN-2001; 2001WO-US000668.

30-JAN-2001; 2001WO-US000669.

05-FEB-2001; 2001WO-US000670.

05-FEB-2001; 2001US-0266860P.

(AEOM-) AEOMICA INC.

Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;

WPI; 2002-179446/23.

New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,

or as specific biomolecule capture probes for surface-enhanced laser

desorption ionization, comprises human myosin-like protein hGDMPLP-1.

Disclosure; SEQ ID NO 7997; 214pp; English.

The present invention describes a human genome-derived myosin-like

protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-

1 can be used in gene therapy and vaccine production. The hGDMPLP-1

nucleic acids can be used as probes to detect, characterise and quantify

hGDMPLP-1 nucleic acids in samples, as amplification substrates, to

provide initial substrates for the recombinant engineering of hGDMPLP-1

protein variants having desired phenotypic improvements, and for

expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be

used as immunogens to raise antibodies that specifically recognise hGDMPLP

-1 proteins, as standards in assays used to determine the concentration

and/or amount specifically of hGDMPLP proteins, as specific biomolecule

capture probes for surface-enhanced laser desorption ionisation, as

therapeutic supplement in patients having specific deficiency in hGDMPLP-1

production, and in vaccines or for replacement therapy. The

polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a

disorder associated with the expression of hGDMPLP-1, in particular heart

and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.

The present sequence represents an oligomer used in the screening of the

hGDMPLP-1 sequence in the exemplification of the present invention. N.B.

The sequence data for this patent did not form part of the printed

specification, but was obtained in electronic format directly from WIPO

at ftp.wipo.int/pub/published_pct_sequence

ABN08003

ID ABN08003 standard; DNA; 17 BP.

XX ABN08003;

AC ABN08003;

XX 29-MAY-2002 (first entry)

DT 29-MAY-2002 (first entry)

XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7995.

DE Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;

XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;

KW skeletal muscle disorder; amplicon; screening; ss.

KW skeletal muscle disorder; amplicon; screening; ss.

XX Homo sapiens.

OS WO200192524-A2.

PN 06-DEC-2001.

PD 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.

XX 26-MAY-2000; 2000US-0207456P.

XX 21-SEP-2000; 2000US-0234587P.

PR 27-SEP-2000; 2000US-0236359P.

PR 04-OCT-2000; 2000GB-00024263.

PR 30-JAN-2001; 2001WO-US000661.

PR 30-JAN-2001; 2001WO-US000662.

PR 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000666.

PR 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.

PR 30-JAN-2001; 2001WO-US000669.

PR 30-JAN-2001; 2001WO-US000670.

PR 05-FEB-2001; 2001US-0266860P.

XX (AEOM-) AEOMICA INC.

PA Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;

XX WPI; 2002-179446/23.

XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,

or as specific biomolecule capture probes for surface-enhanced laser

desorption ionization, comprises human myosin-like protein hGDMPLP-1.

PT Disclosure; SEQ ID NO 7995; 214pp; English.

XX The present invention describes a human genome-derived myosin-like

protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-

1 can be used in gene therapy and vaccine production. The hGDMPLP-1

nucleic acids can be used as probes to detect, characterise and quantify

hGDMPLP-1 nucleic acids in samples, as amplification substrates, to

provide initial substrates for the recombinant engineering of hGDMPLP-1

protein variants having desired phenotypic improvements, and for

expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be

used as immunogens to raise antibodies that specifically recognise hGDMPLP

-1 proteins, as standards in assays used to determine the concentration

and/or amount specifically of hGDMPLP proteins, as specific biomolecule

capture probes for surface-enhanced laser desorption ionisation, as

KW

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Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1992 CACCTTCAAGCAGCTG 2007
 ||||| ||||| |||||
 Db 2 CACCATCAAGCAGCTG 17

RESULT 1850
 ABN02010/c
 ID ABN02010 standard; DNA; 17 BP.
 XX
 AC ABN02010;
 XX
 DT 29-MAY-2002 (first entry)
 XX
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2002.
 XX
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO200192524-A2.
 XX
 PD 06-DEC-2001.
 XX
 PF 25-MAY-2001; 2001WO-US016981.
 XX
 XX 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 05-FEB-2001; 2001US-0266860P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX
 DR WPI; 2002-179446/23.
 XX
 DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX
 PS Disclosure; SEQ ID NO 2002; 214pp; English.
 XX
 CC The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-1
 CC can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1

CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence

XX
 SQ Sequence 17 BP; 1 A; 8 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3194 CCCCAGGCTGGAGGA 3209
 ||||| ||||| |||||
 Db 17 CCCCAGGCTGGAGGA 2

RESULT 1851
 ABN02011/c
 ID ABN02011 standard; DNA; 17 BP.
 XX
 AC ABN02011;
 XX
 DT 29-MAY-2002 (first entry)
 XX
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2003.
 XX
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO200192524-A2.
 XX
 PD 06-DEC-2001.
 XX
 PF 25-MAY-2001; 2001WO-US016981.
 XX
 XX 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 05-FEB-2001; 2001US-0266860P.
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 PA (AEOM-) AEOMICA INC.
 XX
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX
 DR WPI; 2002-179446/23.
 XX
 DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX
 PS Disclosure; SEQ ID NO 2003; 214pp; English.
 XX
 CC The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-1

CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 1 A; 8 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3194 CCCCAGCTGGAGGA 3209
Db 16 CCCCAGCTGGAGGA 1

RESULT 1852
ABN02013/c
ID ABN02013 standard; DNA; 17 BP.
XX
AC ABN02013;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2005.
XX
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon MB;

XX WPI; 2002-179446/23.
XX
DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
PS Disclosure; SEQ ID NO 2005; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 1 A; 9 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1487 GGGCCCCGGGCTGGA 1502
Db 17 GGGCCCCGGGCTGGA 2
RESULT 1853
ABN02014/c
ID ABN02014 standard; DNA; 17 BP.
XX
AC ABN02014;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2006.
XX
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 05-FEB-2001; 2001US-026686P.
 XX (AEOM-) AEOMICA INC.
 XX
 XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon MB;
 PI WPI; 2002-179446/23.
 XX
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX
 XX Disclosure; SEQ ID NO 2006; 214pp; English.
 XX
 XX The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption/ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 1 A; 9 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1487 GGCCCCCGGCTGGA 1502
 Db 16 GGCCCCCGGCTGGA 1
 RESULT 1854
 ABV89728
 ID ABV89728 standard; DNA; 17 BP.
 XX
 AC ABV89728;
 XX
 DT 23-DEC-2002 (first entry)
 XX
 DE Human POSHL1 scanning oligonucleotide SEQ ID NO 441.
 XX
 KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW gene therapy; transgenic; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1239051-A2.
 XX
 PD 11-SEP-2002.

XX 28-JAN-2002; 2002EP-00001165.
 XX
 XX 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 23-MAY-2001; 2001US-00864761.
 PR 10-OCT-2001; 2001US-0328205P.
 XX (AEOM-) AEOMICA INC.
 XX Shannon M;
 PI WPI; 2002-684061/74.
 XX
 XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
 PT -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL1.
 XX
 PS Example 2; SEQ ID NO 441; 60pp + Sequence Listing; English.
 XX
 CC The invention relates to an isolated SH3 domain (POSH)-like signalling
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
 CC acids (S1, AB883999), a sequence having 65% sequence identity to (S1),
 CC (S1) having 95% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway. (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoding (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC treating cancer, they are useful in the development of vaccines and (II) is
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
 CC transgenic non-human animals capable of producing the proteins. The
 CC present sequence is that of a scanning oligonucleotide useful in examples
 CC of the invention. Note: The present sequence did not form part of the
 CC printed specification, but is based on sequence information supplied to
 CC Derwent by the European Patent Office
 XX
 SQ Sequence 17 BP; 3 A; 7 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 546 GGGGCTGCGGCCAAC 561
 Db 2 GCGGCTGCGGCCAAC 17
 RESULT 1855
 ABV89731
 ID ABV89731 standard; DNA; 17 BP.
 XX
 AC ABV89731;
 XX
 DT 23-DEC-2002 (first entry)
 XX
 DE Human POSHL1 scanning oligonucleotide SEQ ID NO 444.
 XX
 KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW gene therapy; transgenic; ss.
 XX
 OS Homo sapiens.
 XX
 OS Homo sapiens.

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PN EP1239051-A2.
XX
XX
PD 11-SEP-2002.
XX
XX
PF 28-JAN-2002; 2002EP-00001165.
XX
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 10-OCT-2001; 2001US-0328205P.
XX
XX
PA (AEOM-) AEOMICA INC.
XX
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PI Shannon M;
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DR WPI; 2002-684061/74.
XX
XX
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX
XX
PS Example 2; SEQ ID NO 444; 60pp + Sequence Listing; English.
XX
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, AB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they are useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX
XX
SQ Sequence 17 BP; 2 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 549 GCTGCGCGCAACAG 564
DB 2 GCTGCGCGCAACTG 17
RESULT 1856
ABV89730
ID ABV89730 standard; DNA; 17 BP.
XX
XX
AC ABV89730;
XX
XX
DT 23-DEC-2002 (first entry)
XX
XX
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 443.
XX
XX
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
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XX
OS Homo sapiens.
XX
XX
PN EP1239051-A2.
XX
XX
PD 11-SEP-2002.
XX
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PF 28-JAN-2002; 2002EP-00001165.
XX
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 10-OCT-2001; 2001US-0328205P.
XX
XX
PA (AEOM-) AEOMICA INC.
XX
XX
PI Shannon M;
XX
XX
DR WPI; 2002-684061/74.
XX
XX
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX
XX
PS Example 2; SEQ ID NO 443; 60pp + Sequence Listing; English.
XX
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, AB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they are useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX
XX
SQ Sequence 17 BP; 2 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 547 GCGCTGCGCGCAACC 562
DB 1 GCGCTGCGCGCAACC 16
RESULT 1857
ABV89732
ID ABV89732 standard; DNA; 17 BP.
XX
XX
AC ABV89732;
XX
XX
DT 23-DEC-2002 (first entry)
XX
XX
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 445.
XX
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KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW gene therapy; transgenic; ss.
 XX Homo sapiens.
 XX EP1239051-A2.
 XX 11-SEP-2002.
 XX 28-JAN-2002; 2002EP-00001165.
 XX 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 23-MAY-2001; 2001US-00864761.
 PR 10-OCT-2001; 2001US-0328205P.
 XX (AEOM-) ABOMICA INC.
 XX Shannon M;
 XX WPI; 2002-684061/74.
 DR Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
 XX -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL1.
 XX Example 2; SEQ ID NO 445; 60pp + Sequence Listing; English.
 XX The invention relates to an isolated SH3 domain (POSH)-like signalling
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
 CC acids (S1, ABB3399), a sequence having 65% sequence identity to (S1),
 CC (S1) having 95% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway. (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoded by (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC treating cancer, they useful in the development of vaccines and (II) is
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
 CC transgenic non-human animals capable of producing the proteins. The
 CC present sequence is that of a scanning oligonucleotide useful in examples
 CC of the invention. Note: The present sequence did not form part of the
 CC printed specification, but is based on sequence information supplied to
 CC Derwent by the European Patent Office
 XX SQ Sequence 17 BP; 2 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 549 GCTGCGGCCAACCG 564
 DB 1 GCTGCGGCCAACCG 16
 RESULT 1858
 ACN14910/c
 ID ACN14910 standard; RNA; 17 BP.
 XX ACN14910;
 AC ACN14910;
 XX 22-APR-2004 (first entry)
 DT

XX WNV minus strand Amberzyme substrate SEQ ID NO 14913.
 DE WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
 XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
 KW encephalitis; myocarditis; meningitis; infection; hepatitis;
 KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
 KW Amberzyme; Zinzyme; ss.
 XX West Nile Virus.
 XX WO200268637-A2.
 XX 06-SEP-2002.
 XX 19-OCT-2001; 2001WO-US048350.
 XX 20-OCT-2000; 2000US-024411P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J A.
 XX Blatt L, Mcswiggen JA;
 PI WPI; 2002-706994/76.
 XX New nucleic acid molecule that modulates replication of West Nile Virus
 PT (WNV), useful for treating a condition related to WNV infection e.g.
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
 XX Claim 23; SEQ ID NO 14913; 495pp; English.
 XX The invention relates to nucleic acid molecules that modulate replication
 CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
 CC treating a condition related to WNV infection e.g. pancreatitis,
 CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
 CC molecule is selected from the group of ribozymes consisting of
 CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
 CC nucleic acid molecules further comprise at least five ribose residues, at
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
 CC least three of the 5' terminal nucleotides and a 3' end modification of a
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
 CC in the specification. The present sequence is that of a nucleic acid
 CC molecule of the invention
 XX SQ Sequence 17 BP; 6 A; 5 C; 3 G; 0 T; 3 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1820 TCCTGCTCTGGAGAT 1835
 DB 16 TTCTGCTCTGGAGAT 1
 RESULT 1859
 ACN00542
 ID ACN00542 standard; RNA; 17 BP.
 XX ACN00542;
 AC ACN00542;
 XX 22-APR-2004 (first entry)
 DT WNV Hammerhead Ribozyme substrate SEQ ID NO 532.
 DE WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
 XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
 KW encephalitis; myocarditis; meningitis; infection; hepatitis;
 KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
 KW

KW Amberzyme; Zinzyme; ss.
 OS West Nile Virus.
 XX
 PN WO200268637-A2.
 XX
 XX
 PD 06-SEP-2002.
 XX
 PF 19-OCT-2001; 2001WO-US048350.
 XX
 PR 20-OCT-2000; 2000US-0242411P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J A.
 XX
 XX
 PI Blatt L, Mcswiggen JA;
 XX
 XX WPI; 2002-706994/76.
 DR
 XX
 XX New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
 PT
 PT
 XX
 PS Claim 23; SEQ ID NO 532; 495pp; English.
 XX
 CC The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention
 CC
 XX
 SQ Sequence 17 BP; 3 A; 3 C; 5 G; 0 T; 6 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 62.5%; Pred. No. 1.6e+03;
 Matches 10; Conservative 5; Mismatches 1; Indels 0; Gaps 0;
 QY 1820 TCCTGCTCTGGGAGAT 1835
 : |||:|||||:
 2 UUCUGCUCUGGAGAU 17
 DB
 RESULT 1860
 ADA99141
 ID ADA99141 standard; DNA; 17 BP.
 XX
 AC ADA99141;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Human MD23 scanning oligonucleotide SEQ ID 130.
 XX
 KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
 KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
 KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
 KW developmental disorder; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1281758-A2.
 XX
 PD 05-FEB-2003.
 XX
 PF 30-JUL-2002; 2002EP-00016874.
 XX
 PR 02-AUG-2001; 2001US-00922181.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Shannon M, Gu Y, Nguyen C;
 XX

PF 30-JUL-2002; 2002EP-00016874.
 XX
 PR 02-AUG-2001; 2001US-00922181.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Shannon M, Gu Y, Nguyen C;
 XX
 DR WPI; 2003-423107/40.
 XX
 XX New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23, MD24, MD27 or MD212, e.g. cancer.
 PT
 PT
 XX
 PS Example 8; SEQ ID NO 130; 103pp; English.
 XX
 CC The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2, MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23, MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic acids can also be used as probes to detect and characterize gross alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
 CC
 XX
 SQ Sequence 17 BP; 7 A; 1 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1295 TGAAGATGCTGAAAGA 1310
 |||||
 1 TGAAGATGCTTAAGA 16
 DB
 RESULT 1861
 ADA99140
 ID ADA99140 standard; DNA; 17 BP.
 XX
 AC ADA99140;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Human MD23 scanning oligonucleotide SEQ ID 129.
 XX
 KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
 KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
 KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
 KW developmental disorder; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1281758-A2.
 XX
 PD 05-FEB-2003.
 XX
 PF 30-JUL-2002; 2002EP-00016874.
 XX
 PR 02-AUG-2001; 2001US-00922181.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Shannon M, Gu Y, Nguyen C;
 XX

DR WPI; 2003-423107/40.

XX New zinc finger-containing proteins and nucleic acids, useful in

PT manufacturing a medicament for treating or preventing a disorder

PT associated with decreased or increased expression or activity of MD23,

PT MD24, MD27 or MD212, e.g. cancer.

PS Example 8; SEQ ID NO 129; 103pp; English.

XX The present invention relates to novel human zinc finger-containing

XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is

CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,

CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome

CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,

CC or in manufacturing a medicament for treating or preventing a disorder

CC associated with decreased or increased expression or activity of MD23,

CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic

CC acids and proteins are also useful for diagnosing or monitoring a disease

CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic

CC acids can also be used as probes to detect and characterize gross

CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are

CC useful in constructing microarrays for measuring gene expression. The

CC proteins are useful as therapeutic agents for gene therapy or as

CC vaccines. The present sequence was used to illustrate the invention.

XX

SQ Sequence 17 BP; 7 A; 2 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 1.6e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1295 TGAAGATGCTGAAGA 1310

Db |||||

2 TGAAGATGCTTAAGA 17

RESULT 1862

ID ABZ61917/c

XX ABZ61917 standard; RNA; 17 BP.

AC ABZ61917;

XX

XX 21-MAR-2003 (first entry)

DE Human H-Ras DNazyme target #708.

XX

XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;

KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;

KW anti-rheumatic; cancer; AIDS; ss.

XX

OS Homo sapiens.

XX

XX WO200297114-A2.

PN

XX

XX 05-DEC-2002.

XX

XX 29-MAY-2002; 2002WO-US016840.

XX

XX 29-MAY-2001; 2001US-0294140P.

PR 06-JUN-2001; 2001US-0296249P.

PR 10-SEP-2001; 2001US-0318471P.

XX

XX (RIBO-) RIBOZYME PHARM INC.

PA

XX

PI Mcswiggen J;

XX

XX WPI; 2003-140484/13.

XX

XX Novel short interfering RNA and enzymatic nucleic acid useful for

PT treating cancer, modulates the expression of a nucleic acid encoding

PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX

PS Claim 58; Page 124; 185pp; English.

XX

CC The invention relates to a novel short interfering RNA (siRNA) nucleic

CC acid molecule or an enzymatic nucleic acid molecule, that modulates

CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,

CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic

CC acid molecule of the invention has cytostatic, anti-HIV, and anti-

CC rheumatic activity. The nucleic acid molecules are useful for reducing

CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are

CC also useful for treating breast, ovarian, colorectal, lung, prostate,

CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences

CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,

CC ABZ66530 - ABZ66595 represent substrate/target sequences for the human

XX ribozymes of the invention

SQ Sequence 17 BP; 1 A; 9 C; 3 G; 0 T; 4 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 1.6e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2900 CAGGAGGCGAGCATGG 2915

Db |||||

16 CAGGAGGCGAGCATGG 1

RESULT 1863

ABZ61373/c

ID ABZ61373 standard; RNA; 17 BP.

XX

AC ABZ61373;

XX

XX 21-MAR-2003 (first entry)

DE Human H-Ras DNazyme target #164.

XX

XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;

KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;

KW anti-rheumatic; cancer; AIDS; ss.

XX

OS Homo sapiens.

XX

XX WO200297114-A2.

PN

XX

XX 05-DEC-2002.

XX

XX 29-MAY-2002; 2002WO-US016840.

XX

XX 29-MAY-2001; 2001US-0294140P.

PR 06-JUN-2001; 2001US-0296249P.

PR 10-SEP-2001; 2001US-0318471P.

XX

XX (RIBO-) RIBOZYME PHARM INC.

PA

XX

PI Mcswiggen J;

XX

XX WPI; 2003-140484/13.

XX

XX Novel short interfering RNA and enzymatic nucleic acid useful for

PT treating cancer, modulates the expression of a nucleic acid encoding

PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX

PS Claim 58; Page 114; 185pp; English.

XX

CC The invention relates to a novel short interfering RNA (siRNA) nucleic

CC acid molecule or an enzymatic nucleic acid molecule, that modulates

CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,

CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic

CC acid molecule of the invention has cytostatic, anti-HIV, and anti-

CC rheumatic activity. The nucleic acid molecules are useful for reducing

CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are

CC also useful for treating breast, ovarian, colorectal, lung, prostate,

CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences

CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,

XX ribozymes of the invention

CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
 CC ribozymes of the invention
 XX
 SQ Sequence 17 BP; 0 A; 3 C; 12 G; 0 T; 2 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2158 CCCCCGCGCCACCCCA 2173
 Db 16 CGCCCGCGCCACCCCA 1
 RESULT 1864
 ACD50343/C
 ID ACD50343 standard; RNA; 17 BP.
 XX
 AC ACD50343;
 XX
 DT 23-SEP-2003 (first entry)
 XX
 DE HBV hammerhead ribozyme substrate sequence #8.
 XX
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 OS Hepatitis B virus.
 XX
 PN WO200281494-A1.
 XX
 PD 17-OCT-2002.
 XX
 PF 26-MAR-2002; 2002WO-US009187.
 XX
 PR 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY D.
 PA (PAVC/) PAVCO P.
 PA (LEEF/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX
 DR WPI; 2003-229207/22.
 XX
 PT Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX
 PS Example 1; Page 136; 387pp; English.
 XX
 CC The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed

CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HBV
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences
 CC disclosed in the present invention
 XX
 SQ Sequence 17 BP; 3 A; 7 C; 5 G; 0 T; 2 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3626 GGGCCCTGAGTCTGGG 3641
 Db 16 GGGCCCTGACTCTGGG 1
 RESULT 1865
 ACD53091/C
 ID ACD53091 standard; RNA; 17 BP.
 XX
 AC ACD53091;
 XX
 DT 24-SEP-2003 (first entry)
 XX
 DE HBV inozyme substrate sequence #711.
 XX
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 OS Hepatitis B virus.
 XX
 PN WO200281494-A1.
 XX
 PD 17-OCT-2002.
 XX
 PF 26-MAR-2002; 2002WO-US009187.
 XX
 PR 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY D.
 PA (PAVC/) PAVCO P.
 PA (LEEF/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX
 DR WPI; 2003-229207/22.
 XX

PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
PS Example 1; Page 164; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences
CC disclosed in the present invention
XX
SQ Sequence 17 BP; 2 A; 10 C; 2 G; 0 T; 3 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 853 GAGGAGGAGCTGCTGG 868
Db 16 GAGGAGGAGCTGCTGG 1
RESULT 1866
ACD54765
ID ACD54765 standard; RNA; 17 BP.
XX
AC ACD54765;
XX
XX 24-SEP-2003 (first entry)
DT
DE HBV DNazyme substrate sequence #120.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis B virus.
XX
XX WO200281494-A1.
PN
XX 17-OCT-2002.
PD
XX 26-MAR-2002; 2002WO-US0009187.
PF
XX 26-MAR-2001; 2001US-00817879.
PR
XX 08-JUN-2001; 2001US-00877478.
PR
XX 24-OCT-2001; 2001US-0296876P.
PR
XX 05-DEC-2001; 2001US-0335059P.
PR
XX (RIBO-) RIBOZYME PHARM INC.
PA
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.

(MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Meswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX WPI; 2003-229207/22.
DR
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
PS Example 1; Page 188; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences
CC disclosed in the present invention
XX
SQ Sequence 17 BP; 4 A; 4 C; 3 G; 0 T; 6 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 62.5%; Pred. No. 1.6e+03;
Matches 10; Conservative 5; Mismatches 1; Indels 0; Gaps 0;
QY 2776 TTCCGGAAACTAGTGT 2791
Db 1 UUCCGGAAACUACUGU 16
RESULT 1867
ADB42118/c
ID ADB42118 standard; DNA; 17 BP.
XX
AC ADB42118;
XX
XX 18-DEC-2003 (revised)
DT
XX 04-DEC-2003 (first entry)
DE
XX Tumour suppression/reversion associated nucleotide #2441.
XX
XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
XX primer; probe; tumour suppression; tumour reversion; apoptosis;
XX virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
XX diagnosis.
OS Homo sapiens.
XX
XX WO2003040369-A2.
PN
XX 15-MAY-2003.
PD
XX 17-SEP-2002; 2002WO-IB004219.
PF
XX 17-SEP-2001; 2001PR-00011981.
PR
XX

Best Local Similarity 81.2%; Pred. No. 1.6e+03;
Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1312 GATGCCACTGACAAAGG 1327
DB 1 GAUGCCGUGACAAAGG 16

RESULT 1872
ADM54335
ID ADM54335 standard; mRNA; 17 BP.
XX
AC ADM54335;
XX
DT 03-JUN-2004 (first entry)
XX
DE Human GRID mRNA substrate sequence #645.
XX
KW Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;
KW NCH ribozyme; G-cleaver ribozyme; Zinzyme; DNzyme; amberzyme; Inozyme;
KW hairpin ribozyme; tissue rejection; graft rejection; leukaemia.
XX
OS Homo sapiens.
XX
PN US2003134806-A1.
XX
PD 17-JUL-2003.
XX
PF 23-FEB-2001; 2001US-00792818.
XX
PR 10-FEB-2000; 2000US-0181594P.
XX
PA (JARV/) JARVIS T.
PA (CARL/) CARLOWITZ I V.
PA (MCSW/) MCSWIGGEN J.
PA (HAMB/) HAMBELIN P A.
PA (ELLI/) ELLIS J H.
XX
PI Jarvis T, Carlowitz IV, Mcswiggen J, Hamblin PA, Ellis JH;
XX
DR WPI; 2003-829646/77.
XX
PT New nucleic acid molecule that down-regulates expression of Grb2-related
PT with insert domain (GRID) gene, useful for treating a condition
PT associated with the level of GRID, e.g. tissue/graft rejection and
PT leukemia.
XX
PS Claim 4; SEQ ID NO 645; 74pp; English.
XX
CC The invention relates to a nucleic acid molecule that down-regulates
CC expression of Grb2-related with insert domain (GRID) gene, e.g. a
CC hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, Zinzyme, DNzyme,
CC amberzyme, Inozyme or hairpin ribozyme. Also include are a mammalian cell
CC including the novel nucleic acid molecule, reducing GRID activity in a
CC cell by contacting the cell with the novel nucleic acid molecule,
CC treating a patient having a condition associated with the level of GRID
CC (e.g. tissue/graft rejection or leukaemia) by contacting the cell with
CC the novel nucleic acid molecule, cleaving RNA of a GRID gene by
CC contacting the cell with the novel nucleic acid molecule, an expression
CC vector comprising a nucleic acid sequences (encoding at least the novel
CC mammalian cell including the expression vector and an enzymatic nucleic
CC acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid
CC molecule is useful for treating a condition associated with the level of
CC GRID, e.g. tissue/graft rejection and leukaemia. The present sequence is
CC a target region for the enzymatic nucleic acids of the invention.
XX
SQ Sequence 17 BP; 2 A; 2 C; 8 G; 0 T; 5 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 1.6e+03;
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2006 TGGTGGAGGACCTGGA 2021
DB 1 UGUGGAGGUGCCUGGA 16

RESULT 1873
ADM54107
ID ADM54107 standard; mRNA; 17 BP.
XX
AC ADM54107;
XX
DT 03-JUN-2004 (first entry)
XX
DE Human GRID mRNA substrate sequence #382.
XX
KW Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;
KW NCH ribozyme; G-cleaver ribozyme; Zinzyme; DNzyme; amberzyme; Inozyme;
KW hairpin ribozyme; tissue rejection; graft rejection; leukaemia.
XX
OS Homo sapiens.
XX
PN US2003134806-A1.
XX
PD 17-JUL-2003.
XX
PF 23-FEB-2001; 2001US-00792818.
XX
PR 10-FEB-2000; 2000US-0181594P.
XX
PA (JARV/) JARVIS T.
PA (CARL/) CARLOWITZ I V.
PA (MCSW/) MCSWIGGEN J.
PA (HAMB/) HAMBELIN P A.
PA (ELLI/) ELLIS J H.
XX
PI Jarvis T, Carlowitz IV, Mcswiggen J, Hamblin PA, Ellis JH;
XX
DR WPI; 2003-829646/77.
XX
PT New nucleic acid molecule that down-regulates expression of Grb2-related
PT with insert domain (GRID) gene, useful for treating a condition
PT associated with the level of GRID, e.g. tissue/graft rejection and
PT leukemia.
XX
PS Claim 4; SEQ ID NO 382; 74pp; English.
XX
CC The invention relates to a nucleic acid molecule that down-regulates
CC expression of Grb2-related with insert domain (GRID) gene, e.g. a
CC hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, Zinzyme, DNzyme,
CC amberzyme, Inozyme or hairpin ribozyme. Also include are a mammalian cell
CC including the novel nucleic acid molecule, reducing GRID activity in a
CC cell by contacting the cell with the novel nucleic acid molecule,
CC treating a patient having a condition associated with the level of GRID
CC (e.g. tissue/graft rejection or leukaemia) by contacting the cell with
CC the novel nucleic acid molecule, cleaving RNA of a GRID gene by
CC contacting the cell with the novel nucleic acid molecule, an expression
CC vector comprising a nucleic acid sequences (encoding at least the novel
CC mammalian cell including the expression vector and an enzymatic nucleic
CC acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid
CC molecule is useful for treating a condition associated with the level of
CC GRID, e.g. tissue/graft rejection and leukaemia. The present sequence is
CC a target region for the enzymatic nucleic acids of the invention.
XX
SQ Sequence 17 BP; 3 A; 8 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.6e+03;
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 45 GCCCAGCGCTGCAG 60
DB 1 GCCCAGCGCTGCAG 16

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RESULT 1874
ID ADM54567
XX ADM54567 standard; mRNA; 17 BP.
XX
XX ADM54567;
AC
XX
XX 03-JUN-2004 (first entry)
DE
XX
XX Human GRID mRNA substrate sequence #877.
XX
XX Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;
XX NCH ribozyme; G-cleaver ribozyme; zinczyme; DNazyme; amberyzyme; Inozyme;
XX hairpin ribozyme; tissue rejection; graft rejection; leukaemia.
XX
XX Homo sapiens.
OS
XX
XX US2003134806-A1.
PN
XX
XX 17-JUL-2003.
XX
XX 23-FEB-2001; 2001US-00792818.
XX
XX 10-FEB-2000; 2000US-0181594P.
XX
XX (JARV/) JARVIS T.
XX (CARL/) CARLOWITZ I V.
XX (MCSW/) MCSWIGGEN J.
XX (HAME/) HAMLIN P A.
XX (ELLI/) ELLIS J H.
XX
XX Jarvis T, Carlowitz IV, Mcswiggen J, Hamblin PA, Ellis JH;
XX WPI; 2003-829646/77.
XX
XX New nucleic acid molecule that down-regulates expression of Grb2-related
XX with insert domain (GRID) gene, useful for treating a condition
XX associated with the level of GRID, e.g. tissue/graft rejection and
XX leukemia.
XX
XX Claim 4; SEQ ID NO 880; 74pp; English.
XX
XX The invention relates to a nucleic acid molecule that down-regulates
XX expression of Grb2-related with insert domain (GRID) gene, e.g. a
XX hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, zinczyme, DNazyme,
XX amberyzyme, inozyme or hairpin ribozyme. Also include are a mammalian cell
XX including the novel nucleic acid molecule, reducing GRID activity in a
XX cell by contacting the cell with the novel nucleic acid molecule,
XX treating a patient having a condition associated with the level of GRID
XX (e.g. tissue/graft rejection or leukaemia) by contacting the cell with
XX the novel nucleic acid molecule, cleaving RNA of a GRID gene by
XX contacting the cell with the novel nucleic acid molecule, an expression
XX vector comprising a nucleic acid sequences (encoding at least the novel
XX nucleic acid molecule in a manner that allows its expression), a
XX mammalian cell including the expression vector and an enzymatic nucleic
XX acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid
XX molecule is useful for treating a condition associated with the level of
XX GRID, e.g. tissue/graft rejection and leukaemia. The present sequence is
XX a target region for the enzymatic nucleic acids of the invention.
XX
XX Sequence 17 BP; 2 A; 2 C; 9 G; 0 T; 4 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 1.6e+03;
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 2006 TGCTGAGGACCTGGA 2021
DB 2 UGGUGGAGGUGCCUGA 17
RESULT 1875
Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 853 GAGGAGGAGCTGCTGG 868
DB 16 GAGGAGGAGCTGCTGG 1
RESULT 1876
ADM57907/c
ADM59278/c
ID ADM59278 standard; RNA; 17 BP.
XX
XX ADM59278;
AC
XX
XX 03-JUN-2004 (first entry)
DE
XX
XX Hepatitis B virus (HBV) RNA target sequence #1412.
XX
XX Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
XX hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
XX cirrhosis; liver failure; lamivudine; interferon; genetic drift;
XX virucide; hepatotropic; antiinflammatory; cytostatic.
XX
XX Hepatitis B virus.
OS
XX
XX US2004054156-A1.
PN
XX
XX 18-MAR-2004.
XX
XX 15-JAN-2003; 2003US-00342902.
XX
XX 14-MAY-1992; 92US-00882712.
XX 07-FEB-1994; 94US-00193627.
XX 08-NOV-1999; 99US-00436430.
XX 20-MAR-2000; 2000US-00531025.
XX 09-AUG-2000; 2000US-00636385.
XX 24-OCT-2000; 2000US-00696347.
XX 08-JUN-2001; 2001US-00877478.
XX
XX (DRAP/) DRAPER K.
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX (MORR/) MORRISSEY D.
XX
XX Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX WPI; 2004-247781/23.
XX
XX Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
XX specifically cleaving RNA derived from hepatitis B virus and comprising
XX one or more binding arms, useful for treating hepatitis and cirrhosis.
XX
XX Disclosure; SEQ ID NO 1412; 122pp; English.
XX
XX The invention relates to an enzymatic nucleic acid molecule that
XX specifically cleaves RNA derived from hepatitis B virus (HBV) and
XX comprising one or more binding arms, without requiring the presence of a
XX 2'-OH group within the molecule for activity. The nucleic acids are
XX useful for treating hepatitis B virus infection, hepatitis,
XX hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
XX combination with other therapies such as lamivudine and interferons. The
XX nucleic acids are useful as diagnostic tools to examine genetic drift and
XX mutations within diseased cells, for detecting the presence of HBV RNA in
XX a cell, for the study of RNA and for down-regulating gene expression of
XX target genes in bacterial, fungal, viral, plant or mammalian cells. This
XX sequence represents an HBV RNA target sequence, used in the scope of the
XX invention. Note: The sequence data for this patent is also available in
XX electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
XX Sequence 17 BP; 2 A; 10 C; 2 G; 0 T; 3 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 853 GAGGAGGAGCTGCTGG 868
DB 16 GAGGAGGAGCTGCTGG 1
RESULT 1876
ADM57907/c

```

ID XX ADM57907 standard; RNA; 17 BP.
AC XX ADM57907;
XX XX
DT XX 03-JUN-2004 (first entry)
XX XX
DE XX Hepatitis B virus (HBV) RNA target sequence #41.
XX XX
KW Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
KW Hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX XX
OS Hepatitis B virus.
XX XX
PN XX US2004054156-A1.
XX XX
PD XX 18-MAR-2004.
XX XX
PF XX 15-JAN-2003; 2003US-00342902.
XX XX
PR XX 14-MAY-1992; 92US-00882712.
PR XX 07-FEB-1994; 94US-00193627.
PR XX 08-NOV-1999; 99US-00436430.
PR XX 20-MAR-2000; 2000US-00531025.
PR XX 09-AUG-2000; 2000US-00636385.
PR XX 24-OCT-2000; 2000US-00696347.
PR XX 08-JUN-2001; 2001US-00877478.
XX XX
PA (DRAP/) DRAPER K.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX XX
PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX XX
DR WPI; 2004-247781/23.
XX XX
PT Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
PT specifically cleaving RNA derived from hepatitis B virus and comprising
PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX XX
PS Disclosure; SEQ ID NO 41; 122pp; English.
XX XX
CC The invention relates to an enzymatic nucleic acid molecule that
CC specifically cleaves RNA derived from hepatitis B virus (HBV) and
CC comprising one or more binding arms, without requiring the presence of a
CC 2'-OH group within the molecule for activity. The nucleic acids are
CC useful for treating hepatitis B virus infection, hepatitis,
CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
CC combination with other therapies such as lamivudine and interferons. The
CC nucleic acids are useful as diagnostic tools to examine genetic drift and
CC mutations within diseased cells, for detecting the presence of HBV RNA in
CC a cell, for the study of RNA and for down-regulating gene expression of
CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
CC sequence represents an HBV RNA target sequence, used in the scope of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX XX
SQ Sequence 17 BP; 3 A; 7 C; 5 G; 0 T; 2 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3626 GGGCCCTGACTCTGGG 3641
DB 16 GGGCCCTGACTCTGGG 1
RESULT 1877
ADM59955
ID ADM59955 standard; RNA; 17 BP.

ID XX ADM57907 standard; RNA; 17 BP.
AC XX ADM57907;
XX XX
DT XX 03-JUN-2004 (first entry)
XX XX
DE XX Hepatitis B virus (HBV) RNA target sequence #41.
XX XX
KW Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
KW Hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX XX
OS Hepatitis B virus.
XX XX
PN XX US2004054156-A1.
XX XX
PD XX 18-MAR-2004.
XX XX
PF XX 15-JAN-2003; 2003US-00342902.
XX XX
PR XX 14-MAY-1992; 92US-00882712.
PR XX 07-FEB-1994; 94US-00193627.
PR XX 08-NOV-1999; 99US-00436430.
PR XX 20-MAR-2000; 2000US-00531025.
PR XX 09-AUG-2000; 2000US-00636385.
PR XX 24-OCT-2000; 2000US-00696347.
PR XX 08-JUN-2001; 2001US-00877478.
XX XX
PA (DRAP/) DRAPER K.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX XX
PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX XX
DR WPI; 2004-247781/23.
XX XX
PT Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
PT specifically cleaving RNA derived from hepatitis B virus and comprising
PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX XX
PS Disclosure; SEQ ID NO 41; 122pp; English.
XX XX
CC The invention relates to an enzymatic nucleic acid molecule that
CC specifically cleaves RNA derived from hepatitis B virus (HBV) and
CC comprising one or more binding arms, without requiring the presence of a
CC 2'-OH group within the molecule for activity. The nucleic acids are
CC useful for treating hepatitis B virus infection, hepatitis,
CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
CC combination with other therapies such as lamivudine and interferons. The
CC nucleic acids are useful as diagnostic tools to examine genetic drift and
CC mutations within diseased cells, for detecting the presence of HBV RNA in
CC a cell, for the study of RNA and for down-regulating gene expression of
CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
CC sequence represents an HBV RNA target sequence, used in the scope of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX XX
SQ Sequence 17 BP; 3 A; 7 C; 5 G; 0 T; 2 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3626 GGGCCCTGACTCTGGG 3641
DB 16 GGGCCCTGACTCTGGG 1
RESULT 1877
ADM59955
ID ADM59955 standard; RNA; 17 BP.

XX XX ADM59955;
XX XX
DT XX 03-JUN-2004 (first entry)
XX XX
DE XX Hepatitis B virus (HBV) RNA target sequence #2089.
XX XX
KW Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
KW Hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX XX
OS Hepatitis B virus.
XX XX
PN XX US2004054156-A1.
XX XX
PD XX 18-MAR-2004.
XX XX
PF XX 15-JAN-2003; 2003US-00342902.
XX XX
PR XX 14-MAY-1992; 92US-00882712.
PR XX 07-FEB-1994; 94US-00193627.
PR XX 08-NOV-1999; 99US-00436430.
PR XX 20-MAR-2000; 2000US-00531025.
PR XX 09-AUG-2000; 2000US-00636385.
PR XX 24-OCT-2000; 2000US-00696347.
PR XX 08-JUN-2001; 2001US-00877478.
XX XX
PA (DRAP/) DRAPER K.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX XX
PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX XX
DR WPI; 2004-247781/23.
XX XX
PT Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
PT specifically cleaving RNA derived from hepatitis B virus and comprising
PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX XX
PS Disclosure; SEQ ID NO 2089; 122pp; English.
XX XX
CC The invention relates to an enzymatic nucleic acid molecule that
CC specifically cleaves RNA derived from hepatitis B virus (HBV) and
CC comprising one or more binding arms, without requiring the presence of a
CC 2'-OH group within the molecule for activity. The nucleic acids are
CC useful for treating hepatitis B virus infection, hepatitis,
CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
CC combination with other therapies such as lamivudine and interferons. The
CC nucleic acids are useful as diagnostic tools to examine genetic drift and
CC mutations within diseased cells, for detecting the presence of HBV RNA in
CC a cell, for the study of RNA and for down-regulating gene expression of
CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
CC sequence represents an HBV RNA target sequence, used in the scope of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX XX
SQ Sequence 17 BP; 4 A; 4 C; 3 G; 0 T; 6 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 17;
Best Local Similarity 62.5%; Pred. No. 1.6e+03;
Matches 10; Conservative 5; Mismatches 1; Indels 0; Gaps 0;
QY 2776 TTCGCGAARACTAGTCT 2791
DB 1 UUCGCGAAACUACUGU 16
RESULT 1878
AAX67240/C
ID AAX67240 standard; RNA; 18 BP.
XX XX

AAAX67240;
 20-JUL-1999 (first entry)
 Mouse CD40 hairpin ribozyme target SEQ ID NO:3872.
 Arthritic condition; graft tolerance; immune response; target; cleavage;
 hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
 stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
 rheumatoid arthritis; autoimmune disease; allergy; inflammation;
 diagnosis; ss.
 Mus sp.
 WO9618736-A2.
 20-JUN-1996.
 22-NOV-1995; 95WO-US015516.
 13-DEC-1994; 94US-00354920.
 23-DEC-1994; 94US-00363253.
 23-DEC-1994; 94US-00363254.
 17-FEB-1995; 95US-00390850.
 20-APR-1995; 95US-00426124.
 02-MAY-1995; 95US-00432874.
 04-MAY-1995; 95US-00434509.
 07-JUL-1995; 95US-000951P.
 07-JUL-1995; 95US-000974P.
 07-AUG-1995; 95US-00512861.
 05-OCT-1995; 95US-00541365.
 (RIBO-) RIBOZYME PHARM INC.
 Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
 McSwiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
 Karpeisky A, Thompson JD, Modak A, Burgin A;
 WPI; 1996-300653/30.
 Enzymatic nucleic acid molecules having a hammer-head motif - used for
 the treatment of arthritis, induction of graft tolerance or treatment of
 auto-immune diseases.
 Claim 10; Page 219; 307pp; English.
 The present invention describes a novel enzymatic nucleic acid (ENA)
 having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
 ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
 ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
 can inhibit collagenase and stromelysin production in the synovial
 membrane of joints for the treatment or prevention of arthritis,
 particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
 be used to treat antigen presenting cells of a donor to induce tolerance
 in a recipient to an alloantigen of a donor. They can also be used for
 enhancing graft tolerance or for treating autoimmune disease, and for
 treating allergies and other inflammatory conditions. The ENA's can also
 be used in diagnosis. Ribozyme therapy impacts on the expression of
 stromelysin without introducing the non-specific effects upon gene
 expression which accompany treatment with retinoids and dexamethasone.
 The concentration of ribozyme required to affect a therapeutic treatment
 is lower than that required of antisense molecules, and is highly
 specific. The present sequence is used in the exemplification of the
 present invention
 Sequence 18 BP; 2 A; 9 C; 3 G; 0 T; 4 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 2899 ACAGGAGGAGGAGGATG 2914
 ||||| ||||| ||||| |||||

Db 16 ACAGGGGGCAGGCATG 1
 RESULT 1879
 AAV02886/c
 ID AAV02686 standard; DNA; 18 BP.
 XX
 AC AAV02686;
 XX
 DT 19-MAY-1998 (first entry)
 XX
 DE Human HLA-C gene intron 1 PCR primer 3.
 XX
 KW Human leukocyte antigen class I gene; HLA-C; allele testing; donor;
 KW tissue matching; recipient; graft rejection; class typing; PCR primer;
 KW ds.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9723645-A1.
 XX
 PD 03-JUL-1997.
 XX
 PF 04-JAN-1996; 96WO-US000362.
 XX
 PR 04-JAN-1996; 96WO-US000362.
 XX
 PA (SLOK) SLOAN KETTERING INST CANCER RES.
 XX
 PI Yang SY, Cereb N;
 XX
 DR WPI; 1997-351080/32.
 XX
 PT DNA-based human leukocyte antigen class I gene typing method - useful for
 PT tissue matching and prevention of graft versus host disease.
 XX
 PS Claim 13; Page 14; 89pp; English.
 XX
 CC AAV02684-V02687 are PCR primers used to amplify the human leukocyte
 CC antigen (HLA) Class I HLA-C gene intron 1 for locus-specific
 CC amplification which is used in a novel method for testing a tissue sample
 CC to determine the allelic type of a HLA class I gene in the sample. The
 CC HLA Class I gene is selected from among HLA-A, -B and -C genes. The
 CC method comprises of treating the tissue sample to obtain nucleic acid
 CC polymers suitable for amplification then combining these polymers with a
 CC first primer which hybridises with a portion of intron 1 or intron 3 of
 CC the HLA Class I gene and a second primer which hybridises with a
 CC different portion of the HLA Class I gene under conditions suitable for
 CC amplification to obtain an amplified product. The product is then
 CC evaluated to determine the allelic type of the HLA-Class I gene. The
 CC method is useful for tissue matching HLA class I antigens between donors
 CC and recipients and hence for preventing graft versus host disease
 XX
 SQ Sequence 18 BP; 2 A; 7 C; 9 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1412 CCAGGGGGGGCCCT 1427
 ||||| ||||| ||||| |||||
 Db 17 CGCCGGGGGGGGCCCT 2
 RESULT 1880
 AAV48450/c
 ID AAV48450 standard; DNA; 18 BP.
 XX
 AC AAV48450;
 XX
 DT 15-OCT-1998 (first entry)
 XX

DE Transforming growth factor beta-1 antisense oligonucleotide N38.
 KW Transforming growth factor beta-1; TGF beta-1; antisense oligonucleotide;
 KW modulate; gene expression; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX BP856579-A1.
 PN
 XX PD
 XX 05-AUG-1998.
 XX
 XX 31-JAN-1997; 97BP-00101531.
 XX
 XX 31-JAN-1997; 97BP-00101531.
 PR
 XX (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
 PA
 XX Schlingensiepen K, Brysch W;
 PI
 XX WPI; 1998-400910/35.
 DR
 XX Preparation of antisense oligonucleotide(s) which lack long runs of
 XX consecutive guanosine or inosine - and have specific ratio of residues
 PT able to form two or three hydrogen bonds, have greater activity and
 PT reduced toxicity, used therapeutically or to modulate growth of cells in
 PT culture.
 XX
 XX Example 1; Fig 3a; 286pp; English.
 PS
 XX AAV48412-84 represent antisense oligonucleotides directed against
 CC transforming growth factor beta-1 (TGF beta-1). The oligonucleotides
 CC exemplify the invention. The specification describes oligonucleotides
 CC that contain 8-30 nucleotides, which contain at most 8 nucleotides that
 CC can each form three hydrogen bonds to cytosine; do not contain four
 CC consecutive nucleotides able to form three H-bonds each to four
 CC consecutive cytosines; do not contain two sequences of three consecutive
 CC nucleotides each able to form three H-bonds to three consecutive
 CC cytosines, and the ratio between residues able to form two H-bonds each
 CC (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
 CC oligonucleotides are used to modulate expression of genes, particularly
 CC the genes for p53, ErbB-2, junB, jund, TGF-beta 1 or beta 2 to control
 CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or
 CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
 CC oligonucleotides can also be used to analyse function of proteins (by
 CC altering their expression or activity) and therapeutically, e.g. in cases
 CC of cancer or (targeting TGF) for stimulating the immune system
 XX
 SQ Sequence 18 BP; 0 A; 3 C; 14 G; 1 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2160 CCGGCCCCACCCAGC 2175
 DB 18 CCGGCCCCACCCCGC 3
 RESULT 1891
 AAV84183
 ID AAV84183 standard; DNA; 18 BP.
 XX
 XX AAV84183;
 AC
 XX 29-MAR-1999 (first entry)
 DT
 XX CUT1 gene promoter downstream primer cutprol.
 DE
 XX CUT1; very long chain fatty acid elongase; VLCFA; wax; transgenic plant;
 KW promoter; PCR; primer; ss.
 XX
 XX Synthetic.

OS Arabidopsis thaliana.
 XX
 PN WO9846766-A1.
 XX
 XX 22-OCT-1998.
 XX
 XX 14-APR-1998; 98WO-CA000343.
 PF
 XX 14-APR-1997; 97US-0043831P.
 PR
 PR- 10-APR-1998; 98US-00058947.
 XX
 XX (UYBR-) UNIV BRITISH COLUMBIA.
 PA
 XX Kunst L, Millar AA;
 PI
 XX WPI; 1999-080740/07.
 DR
 XX DNA encoding protein with very long chain fatty acid elongase activity -
 PT used to create transgenic plants with modified very long chain fatty acid
 PT composition.
 PT
 XX Disclosure; Page 11; 58pp; English.
 PS
 XX This is the nucleotide sequence of CUT1 gene downstream primer cutprol.
 CC It is homologous to an upstream region of the Arabidopsis thaliana CUT1
 CC gene (see AAV84180), and was used with upstream primer cutpro3 (see
 CC AAV84182) to amplify a 1949 bp fragment (see AAV84181) of the CUT1 gene
 CC promoter, and with upstream primer cutpro2 (see AAV84184) to amplify a
 CC truncated (1209 bp) promoter. These promoter fragments were used in
 CC promoter-GUS fusions to examine the tissue and cell specificity of the
 CC promoter. The results indicate that the CUT1 promoter is regulated in a
 CC tissue-specific and cell-specific manner, and that epidermis specificity
 CC is retained in unrelated plant species such as tobacco. No differences in
 CC the strength of expression were detected between the 1.9 kb and 1.2 kb
 CC promoter. The CUT1 promoter can be used to produce transgene constructs
 CC that are specifically expressed in epidermal cells. The CUT1 gene encodes
 CC a protein (see AAV84180) involved in very long chain fatty acid synthesis
 XX
 SQ Sequence 18 BP; 4 A; 2 C; 6 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3106 GCGGAGAGCTTTTAAT 3121
 DB 2 GTCGGAGAGCTTTTAAT 17
 RESULT 1882
 AAX52417
 ID AAX52417 standard; DNA; 18 BP.
 XX
 XX AAX52417;
 AC
 XX 25-JUN-1999 (first entry)
 DT
 XX Forward PCR primer used to amplify cDNA encoding PRO294.
 DE
 XX Secreted protein; transmembrane protein; human; enterocolitis;
 KW Zollinger-Ellison syndrome; gastrointestinal ulceration;
 KW congenital microvillus atrophy; skin disease; cell growth;
 KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
 KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy; fibromodulin;
 KW dermal scarring; Usher Syndrome; Atrophia areata; anti-thrombotic;
 KW wound healing; tissue repair; PCR primer; ss.
 XX
 XX Synthetic.
 OS
 XX WO9914328-A2.
 PN
 XX 25-MAR-1999.
 XX

PF 16-SEP-1998; 98WO-US019330.
 XX 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063328P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063733P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 XX (GETH) GENENTECH INC.
 XX Wood WI, Gurney AL, Goddard A, Pennica D, Chen J, Yuan J;
 XX WPI; 1999-229533/19.
 XX New isolated human genes and polypeptides used in, e.g. treatment of
 XX gastrointestinal ulceration.
 XX Example 37; Page 143; 320pp; English.
 XX Oligonucleotides AAX52276-532 represent PCR primers and probes used to
 CC isolate and amplify cDNA encoding secreted and transmembrane human
 CC proteins (see AAX52213-74 and AAY13344-403). The cDNA sequences are
 CC obtained from cDNA libraries, prepared from fetal lung, fetal kidney,
 CC fetal brain, fetal liver and fetal retina. The encoded polypeptides have
 CC specific uses based on their homology to known polypeptides, e.g. PRO211
 CC and PRO17 can be used for disorders associated with the preservation and
 CC maintenance of gastrointestinal mucosa and the repair of acute and
 CC chronic mucosal lesions (e.g. enterocolitis, Zollinger-Ellison syndrome,

CC gastrointestinal ulceration and congenital microvillus atrophy), skin
 CC diseases associated with abnormal keratinocyte differentiation (e.g.
 CC psoriasis, epithelial cancers such as lung squamous cell carcinoma of the
 CC vulva and gliomas), potent effects on cell growth and development,
 CC diseases related to growth or survival of nerve cells including
 CC Parkinson's disease, Alzheimer's disease, ALS, neuropathies or cancer.
 CC PRO265 can be used as a target for anti-tumor drugs. PRO533 may
 CC scarring. PRO264 can be used as a target for anti-tumor drugs. PRO533 may
 CC be used in the treatment of Usher Syndrome or Atrophia areata; PRO269 can
 CC have therapeutic applications in wound healing and tissue repair; PRO317
 CC can be used for treating problems of the kidney, uterus, endometrium,
 CC blood vessels, or related tissue, e.g. in the heart of genital tract
 XX
 XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCTCAGGGGAG 1116
 Db 3 GCTGTCCACAGGGGAG 18
 RESULT 1883
 AAX59173
 ID AAX59173 standard; DNA; 18 BP.
 XX
 AC AAX59173;
 XX 06-SEP-1999 (first entry)
 XX Human flh84g5 gene 5' region antisense oligonucleotide.
 DE
 XX G protein coupled receptor; flh84g5; human; diagnosis; screening;
 KW therapy; antiparkinsonian; nootropic; neuroprotective; neuroleptic;
 KW antidepressant; antiarrhythmic; antidiabetic; antiinflammatory;
 KW phosphatidylinositol; antisense; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX WO928470-A1.
 PN 10-JUN-1999.
 PD 04-DEC-1998; 98WO-US025832.
 XX 04-DEC-1997; 97US-00985090.
 PR 17-MAR-1998; 98US-00042780.
 XX (MILL-) MILLENNIUM PHARM INC.
 PA
 XX Goodearl ADJ, Glucksmann MA, Xie M, Distefano P;
 WPI; 1999-394858/33.
 XX New nucleic acid encoding an isolated G-protein coupled receptor useful
 XX for treating nervous system related disorders.
 XX Disclosure; Page 64; 140pp; English.
 XX This oligonucleotide is complementary to a portion of the 5' untranslated
 CC region and start codon of the human G protein coupled receptor flh84g5
 CC gene corresponding to nucleotides 766-783 of the sequence given in
 CC AAX59167. It can be used to modulate flh84g5 activity, and hence to treat
 CC a disease or disorder characterized by, or associated with, aberrant or
 CC abnormal flh84g5 nucleic acid expression and/or flh84g5 polypeptide
 CC activity by inhibiting flh84g6 nucleic acid expression. Diseases and
 CC disorders associated with aberrant or abnormal flh84g5 activity include
 CC nervous system related disorders, e.g. amnesia, apraxia, agnosia,
 CC amnesic dysnomia, amnesic spatial disorientation, Klüver-Bucy syndrome,

CC Alzheimer's related memory loss and learning disability; disorders
 CC affecting consciousness such as visual hallucinations, perceptual
 CC disturbances or delirium associated with Lewy body dementia, schitzo-
 CC effective disorders, schizophrenia with mood swings, depressive illness
 CC (primary and secondary); affective disorders such as REM sleep
 CC abnormalities in patients suffering from e.g. depression, paradoxical
 CC sleep abnormalities, sleep-wakefulness, and body temperature or
 CC respiratory depression abnormalities during sleep; disorders affecting
 CC pain generation mechanisms e.g. pain related to irritable bowel syndrome
 CC or chest pain; movement disorders e.g. Parkinson's disease related
 CC movement disorders; eating disorders e.g. insulin hypersecretion related
 CC obesity or drinking disorders, e.g. diabetic polydipsia; smooth muscle
 CC related disorders, e.g. irritable bowel syndrome, diverticular disease,
 CC urinary incontinence, oesophageal achalasia or chronic obstructive
 CC airways disease; cardiac muscle disorders, e.g. pathologic bradycardia or
 CC tachycardia, arrhythmia, flutter or fibrillation; and gland related
 CC disorder such as xerostomia or diabetes mellitus
 XX
 SQ Sequence 18 BP; 2 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3658 GCCTGAGGGCCATGG 3673
 ||||| |||||
 DB 1 GCCTGCTGGCCATGG 16
 RESULT 1884
 AAH44579
 ID AAH44579 standard; DNA; 18 BP.
 XX
 AC AAH44579;
 XX
 DT 20-MAR-2003 (revised)
 DT 01-NOV-2001 (first entry)
 XX
 DE Rat mACHR-6 antisense oligonucleotide SEQ ID NO:24.
 XX
 KW Rat; muscarinic acetylcholine receptor 6; mACHR-6; detection;
 KW antiparkinsonian; nootropic; neuroprotective; neuroleptic; antidiabetic;
 KW antidepressant; antiarrhythmic; antiinflammatory; carnitine; pain;
 KW G-protein coupled receptor; nervous system related disorder; xerostomia;
 KW disorders affecting consciousness; affective disorder; movement disorder;
 KW irritable bowel syndrome; drinking disorder; gland related disorder;
 KW smooth muscle related disorder; cardiac muscle disorder; eating disorder;
 KW diabetes mellitus; diagnosis; drug screening; antisense; ss.
 XX
 OS Rattus sp.
 XX
 PN US6093545-A.
 XX
 PD 25-JUL-2000.
 XX
 PF 02-OCT-1998; 98US-00165543.
 XX
 PR 04-DEC-1997; 97US-00985090.
 PR 17-MAR-1998; 98US-00042780.
 XX
 XX (MILL-) MILLENNIUM PHARM INC.
 XX
 XX Glucksmann MA, Goodearl ADJ;
 XX
 XX WPI; 1999-394858/33.
 XX
 XX New nucleic acid encoding an isolated G-protein coupled receptor useful
 PT for treating nervous system related disorders.
 XX
 XX Disclosure; Col 49; 64pp; English.
 XX
 XX The present invention describes muscarinic acetylcholine receptor 6
 CC (mACHR-6), which is a member of the G family of proteins. mACHR-6 has

CC antiparkinsonian, nootropic, neuroprotective, neuroleptic, antidiabetic
 CC antidepressant, antiarrhythmic and antiinflammatory activities. The mACHR
 CC -6 protein, is capable of modulating the effects of a G-protein coupled
 CC receptor (GPCR) ligand such as acetylcholine or an acetylcholine like
 CC molecule such as carnitine, e.g. by modulating phospholipase C
 CC signalling/activity. Products from the present invention can be used for
 CC treating disorders mediated by abnormal mACHR-6 protein activity such as
 CC nervous system related disorders, disorders affecting consciousness,
 CC affective disorders such as REM sleep abnormalities, disorders affecting
 CC pain generation mechanisms such as pain related to irritable bowel
 CC syndrome or chest pain, movement disorders, eating disorders, drinking
 CC disorders, smooth muscle related disorders, cardiac muscle disorders, and
 CC gland related disorders such as xerostomia or diabetes mellitus. The
 CC products can also be used for detection, diagnosis and drug screening.
 CC The present sequence represents a rat mACHR-6 antisense oligonucleotide
 CC which is given in the exemplification of the present invention. (Updated
 CC on 20-MAR-2003 to correct DR field.)
 XX
 SQ Sequence 18 BP; 2 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3658 GCCTGAGGGCCATGG 3673
 ||||| |||||
 DB 1 GCCTGCTGGCCATGG 16
 RESULT 1885
 AAA11070/C
 ID AAA11070 standard; DNA; 18 BP.
 XX
 AC AAA11070;
 XX
 DT 28-JUL-2000 (first entry)
 XX
 DE Locus specific amplification primer #3 for HLA-C gene.
 XX
 KW Tissue sample testing; allelic typing; human leukocyte antigen;
 KW PCR primer; probe; hybridisation; intron; amplification; ss;
 KW allelic variation; non-classical HLA class I gene; exon.
 XX
 OS Homo sapiens.
 XX
 PN US6030775-A.
 XX
 PD 29-FEB-2000.
 XX
 PF 22-DEC-1995; 95US-00577081.
 XX
 PR 22-DEC-1995; 95US-00577081.
 XX
 PA (CERE/) CEREB N.
 PA (YANG/) YANG S Y.
 XX
 PI Cereb N, Yang SY;
 XX
 DR WPI; 2000-223159/19.
 XX
 XX Testing a tissue sample to determine the allelic type of a human
 PT leukocyte antigen class I gene comprises amplification of nucleic acid
 PT polymers with primers which flank a region including an allelic variation
 PT of the HLA class I gene.
 XX
 PS Claim 13; Col 11; 90pp; English.
 XX
 XX The invention relates to a method (I) for testing a tissue sample to
 CC determine the allelic type of a human leukocyte antigen (HLA) class I
 CC gene in the sample, where the HLA class I gene is selected from HLA-A,
 CC HLA-B or HLA-C, by: (a) treating the tissue sample to obtain nucleic acid
 CC polymers suitable for amplification; (b) combining the nucleic acid
 CC polymers with a primer which hybridizes with a portion of intron 1 or

CC intron 3 of the HLA class I gene, and a second primer which hybridizes
 CC with a different portion of the HLA class I gene and performing
 CC amplification, where the primers flank a region including at least one
 CC site of allelic variation in at least one of exons 2 or 3 of the HLA
 CC class I gene and where the first primer is a locus specific primer which
 CC hybridizes with intron 1 or 3 of only one of the HLA class I genes; and
 CC (c) evaluating the amplified product to determine the allelic type of the
 CC HLA class I gene. The method is useful for testing a tissue sample to
 CC determine the allelic type of a classical or non-classical HLA class I
 CC gene in the sample. The sequences AA11039-A11122 represent consensus
 CC sequences of introns and exons of the HLA genes and primers and probes
 CC used to isolate and analyse the HLA genes

XX
 SQ Sequence 18 BP; 2 A; 7 C; 9 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1412 CGCAGGCGGGCCCT 1427
 Db |||||

RESULT 1886
 ADC78549
 ID ADC78549 standard; DNA; 18 BP.
 AC
 XX ADC78549;
 XX
 DT 01-JAN-2004 (first entry)
 DE Human PRO protein-related forward PCR primer SEQ ID 229.
 DE
 KW antiinflammatory; antiulcer; cytostatic; antipsoriatic; antiparkinsonian;
 KW neurotropic; neuroprotective; vasotropic; chemotactic; angiogenic;
 KW neurotrophic; osteopathic; antiasthmatic; antiahrthritic; antirheumatic;
 KW antiarteriosclerotic; cardiast; antidiabetic; cerebroprotective;
 KW thrombolytic; immunomodulator; enterocolitis; Zollinger-Ellison syndrome;
 KW gastrointestinal ulceration; psoriasis; cancer; Parkinson's disease;
 KW Alzheimer's; ALS; neuropathy; dermal scarring; wound healing;
 KW nerve repair; thrombosis; bone; cartilage formation; angiogenesis;
 KW asthma; rheumatoid arthritis; multiple sclerosis; inflammatory disorder;
 KW atherosclerosis; cardiac injury; infertility; premature aging; AIDS;
 KW diabetes; stroke; gene therapy; transgenic; PRO; human; ss; primer; PCR.

OS Homo sapiens.
 XX WO200015796-A2.
 XX
 PD 23-MAR-2000.
 XX
 PF 15-SEP-1999; 99WO-US021090.
 XX
 PF 16-SEP-1998; 98WO-US019330.
 XX
 XX (GETH) GENENTECH INC.
 XX
 PI Chen J, Goddard A, Gurney AL, Hillan K, Pennica D, Wood WI;
 PI Yuan J;
 XX
 DR WPI; 2000-271434/23.
 XX
 PT Novel nucleic acids encoding secreted and transmembrane polypeptides with
 PT homology, e.g. to growth and cancer-associated antigens.
 XX
 PS Example 37; SEQ ID NO 229; 355pp; English.
 XX
 CC The invention relates to a novel nucleic acid encoding a PRO polypeptide.
 CC The polypeptides and polynucleotides of the invention may be useful as
 CC research tools and as therapeutics for treating enterocolitis, Zollinger-
 CC Ellison syndrome, gastrointestinal ulceration, psoriasis, cancer,
 CC Parkinson's disease, Alzheimer's disease, ALS, neuropathies, dermal

CC scarring and wound healing, nerve repair, thrombosis, bone and/or
 CC cartilage formation, angiogenesis, asthma, rheumatoid arthritis, multiple
 CC sclerosis, inflammatory disorders, atherosclerosis, cardiac injury,
 CC infertility, premature aging, AIDS, diabetes complications and stroke.
 CC The molecules may also be utilised during gene therapy procedures and
 CC transgenic animal production. The current sequence is that of the PCR
 CC primer of the invention which was used to analyse the human PRO DNA of
 CC the invention.

XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1101 GCTGTCTCAGGGGAG 1116
 Db |||||

RESULT 1887
 AAF72575
 ID AAF72575 standard; DNA; 18 BP.
 AC
 XX AAF72575;
 XX
 DT 24-APR-2001 (first entry)
 DE Human PRO polypeptide gene PCR primer SEQ ID NO: 229.
 DE
 KW Human; PRO; dermatological; antipsoriatic; cytostatic; antiinflammatory;
 KW antiparkinsonian neurotropic; neuroprotective; vulnerary; cardiant;
 KW antiangiogenic; vasotropic; antiasthmatic; antirheumatic; cancer;
 KW antiarthritic; antinfertility; antidiabetic; antitival; diabetes;
 KW ophthalmological; gene therapy; skin disease; gastrointestinal disorder;
 KW ischaemia; inflammation; PCR primer; ss.

OS Homo sapiens.
 XX WO200104311-A1.
 XX
 PD 18-JAN-2001.
 XX
 PF 22-FEB-2000; 2000WO-US004414.
 XX
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 08-SEP-1999; 99US-0146222P.
 PR 13-SEP-1999; 99WO-US020594.
 PR 15-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 05-OCT-1999; 99WO-US021547.
 PR 29-NOV-1999; 99WO-US023089.
 PR 30-NOV-1999; 99WO-US028214.
 PR 02-DEC-1999; 99WO-US028313.
 PR 02-DEC-1999; 99WO-US028564.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 XX
 PA (GETH) GENENTECH INC.
 XX
 PI Ashkenazi AJ, Botstein D, Deenoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Geiber H, Gerritsen ME, Goddard A;
 PI Godowski P, Grimaldi CJ, Gurney AL, Hillan KJ, Kljavin IJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX
 DR WPI; 2001-081051/09.
 XX
 PT Sixty one nucleic acids encoding PRO polypeptides which are useful in the

PT treatment of skin diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma) and neurodegenerative diseases (e.g. Alzheimer's disease).

XX Example 37; Page 181; 393pp; English.

XX The present sequence is a primer which was used in the isolation of one of sixty one nucleic acids encoding novel secreted and transmembrane PRO polypeptides. The PRO polypeptides are useful for treating skin diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma), gastrointestinal disorders (e.g. lung squamous cell carcinoma), diseases (e.g. Alzheimer's disease, Parkinson's disease), wound repair, cardiovascular disorders (e.g. endometrial bleeding angiogenesis, ischaemias such as coronary ischaemia, atherosclerosis), inflammatory disorders (e.g. asthma, rheumatoid arthritis, multiple sclerosis), infertility, AIDS and diabetes and retinal disorders such as retinitis pigmentosa. The PRO nucleic acids have applications in molecular biology, including use as hybridization probes, and in chromosome and gene mapping

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1101 GCTGTCCTCAGGGGAG 1116

|||||
Db 3 GCTGTCACAGGGGAG 18

RESULT 1888

ABL88802

ID ABL88802 standard; DNA; 18 BP.

XX ABL88802;

XX 22-MAY-2002 (first entry)

XX HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:24.

DE Binding molecule; HIV-1; human immunodeficiency virus type 1;
KW reverse transcriptase; binding group; ss.

XX Human immunodeficiency virus 1.

OS Synthetic.

XX BP1174518-A1.

PN 23-JAN-2002.

XX 20-JUL-2000; 2000EP-00202611.

XX 20-JUL-2000; 2000EP-00202611.

XX (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.

XX Loukachov VV, Van Gemen B, Goudsmit J;

XX WPI; 2002-156696/21.

XX Collection of binding groups for determining or typing samples,
PT especially clinical samples, has groups capable to identify essentially
PT all members of the family of nucleic acids of relatively high
PT significance.

XX Disclosure; Page 13; 166pp; English.

XX The present invention describes a collection of binding groups for a
CC family of nucleic acids comprising members of relative high and relative
CC low significance, where the binding groups are selected to be capable to
CC identify, alone or in combination, essentially all members of the family
CC of nucleic acids of relatively high significance. The collection of

CC binding groups is useful for typing of nucleic acid in a clinical sample,
CC by contacting the nucleic acid with the collection and determining
CC whether one or more binding groups bound to the nucleic acid of the
CC sample. This method is useful for determining whether the sample
CC comprises at least a part of a member of relatively high significance of
CC a family of nucleic acids. The collection of binding groups is useful for
CC diagnosing the severity of a disease caused by a pathogen containing a
CC member of a family of nucleic acids. ABL88779 to ABL89321 represent
CC oligonucleotide sequences used in the exemplification of the present
CC invention

XX Sequence 18 BP; 6 A; 1 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2845 ACATATATCGAAGG 2860

|||||
Db 3 ACATTTATCGAAGG 18

RESULT 1889

ACA60188
ID ACA60188 standard; DNA; 18 BP.

XX ACA60188;

XX 12-JUN-2003 (first entry)

XX Human secreted/transmembrane protein PRO294 PCR primer #2.

XX Human; ss; PCR; secreted protein; transmembrane protein; PRO;
KW gene therapy; chromosome identification; chromosome marker; primer.

XX Homo sapiens.

XX US2003003530-A1.

XX 02-JAN-2003.

XX 11-JUL-2001; 2001US-00904011.

XX 17-SEP-1997; 97US-0059113P.

XX 17-SEP-1997; 97US-0059115P.

XX 17-SEP-1997; 97US-0059117P.

XX 17-SEP-1997; 97US-0059119P.

XX 17-SEP-1997; 97US-0059121P.

XX 17-SEP-1997; 97US-0059122P.

XX 17-SEP-1997; 97US-0059184P.

XX 18-SEP-1997; 97US-0059263P.

XX 18-SEP-1997; 97US-0059266P.

XX 15-OCT-1997; 97US-0062125P.

XX 17-OCT-1997; 97US-0062285P.

XX 17-OCT-1997; 97US-0062287P.

XX 21-OCT-1997; 97US-0063486P.

XX 24-OCT-1997; 97US-0062814P.

XX 24-OCT-1997; 97US-0062816P.

XX 24-OCT-1997; 97US-0063045P.

XX 24-OCT-1997; 97US-0063120P.

XX 24-OCT-1997; 97US-0063121P.

XX 24-OCT-1997; 97US-0063127P.

XX 24-OCT-1997; 97US-0063128P.

XX 27-OCT-1997; 97US-0063327P.

XX 27-OCT-1997; 97US-0063329P.

XX 28-OCT-1997; 97US-0063541P.

XX 28-OCT-1997; 97US-0063542P.

XX 28-OCT-1997; 97US-0063544P.

XX 28-OCT-1997; 97US-0063549P.

XX 28-OCT-1997; 97US-0063550P.

XX 28-OCT-1997; 97US-0063564P.

XX 29-OCT-1997; 97US-0063435P.

XX 29-OCT-1997; 97US-0063704P.

29-OCT-1997; 97US-0063732P.
 29-OCT-1997; 97US-0063734P.
 29-OCT-1997; 97US-0063735P.
 29-OCT-1997; 97US-0063738P.
 29-OCT-1997; 97US-0064215P.
 31-OCT-1997; 97US-0063870P.
 31-OCT-1997; 97US-0064103P.
 03-NOV-1997; 97US-0064248P.
 07-NOV-1997; 97US-0064809P.
 12-NOV-1997; 97US-0065186P.
 17-NOV-1997; 97US-0065846P.
 18-NOV-1997; 97US-0065933P.
 21-NOV-1997; 97US-0066120P.
 21-NOV-1997; 97US-0066364P.
 24-NOV-1997; 97US-0066453P.
 24-NOV-1997; 97US-0066466P.
 24-NOV-1997; 97US-0066511P.
 24-NOV-1997; 97US-0066770P.
 24-NOV-1997; 97US-0066772P.
 10-SEP-1998; 98WO-US018824.
 14-SEP-1998; 98WO-US019177.
 16-SEP-1998; 98WO-US019330.
 17-SEP-1998; 98WO-US019437.
 01-DEC-1998; 98WO-US02108.
 08-SEP-1999; 99WO-US020594.
 13-SEP-1999; 99WO-US020944.
 15-SEP-1999; 99WO-US021090.
 15-SEP-1999; 99WO-US021547.
 05-OCT-1999; 99WO-US022089.
 29-NOV-1999; 99WO-US028214.
 30-NOV-1999; 99WO-US028313.
 01-DEC-1999; 99WO-US028301.
 02-DEC-1999; 99WO-US028564.
 02-DEC-1999; 99WO-US028565.
 16-DEC-1999; 99WO-US030095.
 20-DEC-1999; 99WO-US030911.
 20-DEC-1999; 99WO-US030999.
 05-JAN-2000; 2000WO-US000219.
 11-FEB-2000; 2000WO-US003565.
 22-FEB-2000; 2000WO-US004414.
 24-FEB-2000; 2000WO-US005004.
 02-MAR-2000; 2000WO-US005841.
 30-MAR-2000; 2000WO-US007377.
 30-MAR-2000; 2000WO-US008439.
 22-MAY-2000; 2000WO-US014042.
 02-JUN-2000; 2000WO-US015264.
 28-JUL-2000; 2000WO-US020710.
 24-AUG-2000; 2000WO-US023328.
 18-SEP-2000; 2000WO-US066530.
 (GETH) GENENTECH INC.
 Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, KJlavin IJ;
 Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 Williams PM, Wood WI;
 WPI; 2003-329602/31.
 New transmembrane polypeptides and nucleic acids encoding the
 polypeptides, useful in gene therapy, in chromosome identification, as
 chromosome markers, in generating probes and in tissue typing.
 Example 37; Page 111; 484pp; English.
 The invention relates to an isolated nucleic acid with at least 80%
 nucleic acid sequence identity to a nucleotide sequence encoding one of
 61 secreted/transmembrane polypeptides, or PRO polypeptides or encoding a
 PRO protein/extracellular domain. Also included are a vector comprising
 the PRO nucleic acid, a host cell comprising the vector, producing a PRO
 polypeptide (by culturing the host cell for the expression of the PRO
 polypeptide, and recovering the PRO polypeptide from the cell culture),

an isolated PRO polypeptide (having at least 80% sequence identity to: (a) an amino acid sequence selected from the 61 PRO proteins; (b) an amino acid sequence encoded by a nucleic acid molecule deposited with an ATCC number (detailed in the specification); or (c) an extracellular domain of a PRO polypeptide or to a PRO polypeptide lacking its associated signal peptide), a chimeric molecule comprising a PRO polypeptide of fused to a heterologous amino acid sequence, an anti-PRO antibody, detecting a PRO245 or PRO1868 in a sample suspected of containing the polypeptide, linking a bioactive molecule to a cell expressing a PRO245 or PRO1868 and modulating at least one biological activity of a cell expressing a PRO245 or PRO1868. Nucleic acids which encode PRO can be used to generate either transgenic animals or knock-out animals which may be used in the development and screening of therapeutically useful reagents. The nucleic acids may also be used in gene therapy, in chromosome identification, as chromosome markers, or in generating probes. The PRO polypeptides are useful as molecular markers for protein electrophoresis, and the isolated nucleic acids may be used for recombinantly expressing those markers. The PRO polypeptides and nucleic acids may also be used in tissue typing. Anti-PRO antibodies are useful in diagnostic assays for PRO, and in affinity purification of PRO from recombinant cell culture or natural sources. The present sequence is a PCR primer used to isolate a cDNA encoding a PRO protein

Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCCTCAGGGAG 1116
 ||||| |||||
 Db 3 GCTGTCCACAGGGAG 18

RESULT 1890
 ACD07588
 ID ACD07588 standard; DNA; 18 BP.
 XX
 AC ACD07588;
 XX
 DT 07-AUG-2003 (first entry)
 XX
 DE Novel human secreted and transmembrane protein PCR primer #90.
 XX Human; secreted and transmembrane protein; PRO; pharmaceutical;
 KW diagnostic; biosensor; bioindicator; Parkinson's disease;
 KW Alzheimer's disease; inflammation; nephritis; wound healing;
 KW nerve repair; collateral blood vessel formation; cancer;
 KW colorectal cancer; haemorrhage; rheumatoid arthritis; diabetes;
 KW cirrhosis; fibrosis; restenosis; dermal fibrotic condition; keloid;
 KW scarring; ischaemia; stroke; hypertension; heart attack; atherosclerosis;
 KW infertility; gene therapy; PCR; primer; ss.
 XX Homo sapiens.
 OS
 PN US2002197671-A1.
 XX
 PD 26-DEC-2002.
 XX
 PF 17-JUL-2001; 2001US-00907824.
 XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059124P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.

PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 28-OCT-1997; 97US-0063435P.
 PR 28-OCT-1997; 97US-0063704P.
 PR 28-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065893P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 24-NOV-1997; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 01-DEC-1998; 98WO-US025108.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 30-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 23-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.
 PA (GETH) GENENTECH INC.
 XX
 XX
 PI Ashkenazi A, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;

PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2003-370793/35.
 XX
 XX New genes and secreted and transmembrane polypeptides (e.g. PRO245 or
 PT PRO335), useful for treating or diagnosing e.g. Alzheimer's disease,
 PT cancers, hemorrhage, rheumatoid arthritis, diabetes, cirrhosis, ischemia
 PT or strokes.
 XX
 PS Example 37; Page 103; 482pp; English.
 XX
 CC The invention describes a new isolated nucleic acid molecule comprising
 CC the full length coding sequence of the DNA deposited with the American
 CC Type Culture Collection (e.g. ATCC Deposit No. 209258), or a sequence
 CC with at least 80% identity to a DNA encoding a PRO polypeptide comprising
 CC any of 61 sequences having 164-1119 amino acids fully defined in the
 CC specification. The PRO polypeptides or polynucleotides are useful as
 CC pharmaceuticals, diagnostics, biosensors or bioreactors. These are
 CC particularly useful for detecting or treating e.g. Parkinson's disease,
 CC Alzheimer's disease, inflammations, nephritis, wound healing, nerve
 CC repair, collateral blood vessel formation, cancers (e.g. colorectal
 CC cancer), haemorrhage (or reduce risk for haemorrhage), rheumatoid
 CC arthritis, diabetes, cirrhosis of the liver, fibrosis of the lungs,
 CC restenosis, dermal fibrotic conditions (e.g. keloids or scarring),
 CC ischaemia, strokes, hypertension, heart attacks, atherosclerosis, or
 CC infertility in mammals (e.g. humans, dogs, cats, cattle, horses, sheep,
 CC pigs, goats, or rabbits) The PRO polypeptides are useful as targets for
 CC therapeutic intervention in these diseases, and diagnostic determination
 CC of the presence of these diseases. The PRO polypeptides are also useful
 CC as molecular weight markers, or for chromosome identification. The PRO
 CC genes are useful as hybridisation probes, or for screening libraries of
 CC human cDNA, genomic DNA or mRNA. The PRO genes may also be used in gene
 CC therapy, particularly for replacing a defective gene. This sequence
 CC represents a novel human secreted and transmembrane PRO polypeptide
 CC associated primer
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 1101 GCTGCTCTCAGGGGAG 1116
 |||||
 Db 3 GCTGCTCAGGGGAG 18
 RESULT 1891
 ABX71636
 ID ABX71636 standard; DNA; 18 BP.
 XX
 AC ABX71636;
 XX
 XX DT 10-MAR-2003 (first entry)
 XX Human secreted/transmembrane protein PRO294 PCR primer #2.
 DE
 XX Human; PRO; secreted protein; transmembrane protein; enterocolitis;
 KW gastrointestinal ulceration; skin disease; ss; PCR; primer;
 KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
 KW squamous cell carcinoma; Alzheimer's disease; Parkinson's disease;
 KW amyotrophic lateral sclerosis; inflammatory disease;
 KW rheumatoid arthritis; asthma; multiple sclerosis; organ failure;
 KW atherosclerosis; cardiac injury; infertility; birth defect;
 KW premature aging; AIDS; acquired immunodeficiency syndrome; cancer;
 KW diabetic complication; wound repair.
 XX
 OS Homo sapiens.
 XX
 PN US2002132240-A1.
 XX
 PD 19-SEP-2002.

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XX 18-JUL-2001; 2001US-00909320.
PF 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 18-SEP-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063428P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 28-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 31-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 01-DEC-1998; 98WO-US025108.
PR 08-SEP-1999; 98WO-US020594.
PR 13-SEP-1999; 98WO-US020844.
PR 15-SEP-1999; 98WO-US021090.
PR 15-SEP-1999; 98WO-US021547.
PR 05-OCT-1999; 98WO-US022089.
PR 29-NOV-1999; 98WO-US028214.
PR 30-NOV-1999; 98WO-US028313.
PR 01-DEC-1999; 98WO-US028301.
PR 02-DEC-1999; 98WO-US028564.
PR 02-DEC-1999; 98WO-US028565.
PR 16-DEC-1999; 98WO-US030911.
PR 20-DEC-1999; 98WO-US030095.
PR 20-DEC-1999; 98WO-US030999.
PR 06-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.

24-FEB-2000; 2000WO-US005004.
02-MAR-2000; 2000WO-US005841.
20-MAR-2000; 2000WO-US007377.
30-MAR-2000; 2000WO-US008439.
22-MAY-2000; 2000WO-US014042.
02-JUN-2000; 2000WO-US015264.
28-JUL-2000; 2000WO-US020710.
24-AUG-2000; 2000WO-US023328.
18-SEP-2000; 2000US-00665350.
XX (GETH ) GENENTECH INC.
PA Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
XX Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, KJavin LJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX WPI; 2003-147434/14.
DR New PRO polypeptides and nucleic acid molecules, useful in diagnosing or
XX treating inflammatory diseases, organ failure, atherosclerosis, cardiac
XX injury, infertility, cancer, AIDS, Alzheimer's disease or Parkinson's
XX disease.
XX Example 37; Page 101; 473pp; English.
PS The invention relates to an isolated PRO polypeptide having at least 80%
XX amino acid sequence identity to: (a) any one of 61 fully defined amino
XX acid sequences given in the specification (appearing as ABUS4347-
XX ABUS4407); (b) an amino acid sequence encoded by the nucleotide sequence
XX deposited under American Type Culture Collection (accession numbers
XX listed in the specification); (c) any one of the PRO sequences which
XX lacks its associated signal peptide; (d) an extracellular domain of the
XX PRO polypeptide with its associated signal peptide; or (e) an
XX extracellular domain of the PRO polypeptide which lacks its associated
XX signal peptide. Also include are the nucleic acids encoding the PRO
XX polypeptides, vectors, host cells and anti-PRO antibodies. The PRO
XX polypeptides and nucleic acids are useful in diagnosing or treating
XX enterocolitis, gastrointestinal ulceration, skin diseases associated with
XX abnormal keratinocyte differentiation, e.g. psoriasis or epithelial
XX cancers such as squamous cell carcinoma, Alzheimer's disease, Parkinson's
XX disease, amyotrophic lateral sclerosis, inflammatory diseases, e.g.
XX rheumatoid arthritis, asthma or multiple sclerosis, organ failure,
XX atherosclerosis, cardiac injury, infertility, birth defects, premature
XX aging, AIDS, cancer, diabetic complications, or mutations in general. The
XX polypeptides are also useful for wound repair and associated therapies
XX concerned with re-growth of tissue. The nucleotide sequences may be used
XX as hybridisation probes in chromosome and gene mapping, or in generating
XX antisense RNA and DNA. PRO nucleic acids are also useful in preparing PRO
XX polypeptides, in assays to identify other proteins or molecules involved
XX in binding reaction, to generate transgenic animals or knockout animals,
XX which in turn are useful in the development and screening of
XX therapeutically useful reagents, for chromosome identification, and
XX tissue typing. The PRO polypeptides and nucleic acid molecules are also
XX useful in gene therapy, and as molecular weight markers for protein
XX electrophoresis purposes. The anti-PRO antibodies may be used in
XX diagnostic assays for PRO, or for the affinity purification of PRO from
XX recombinant cell culture or natural sources. The present sequence is a
XX PCR primer used to isolate a cDNA encoding a PRO polypeptide
XX
SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1101 GCTGTCTTCAGGGGAG 1116
Db 3 GCTGTCCACAGGGGAG 18
RESULT 1892

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ACH06968
ID ACH06968 standard; DNA; 18 BP.
XX
AC ACH06968;
XX
DT 08-OCT-2003 (first entry)
XX
DE Human secreted/transmembrane polypeptide PRO294 forward primer #2.
XX
KW Human; PCR; primer; abnormal bleeding; gynaecological disease; tumour;
KW hysterectomy; angiogenesis; coronary ischaemic condition; skin disease;
KW gastrointestinal mucosa disorder; acute mucosal lesion; neuropathy; ALS;
KW chronic mucosal lesion; abnormal keratinocyte differentiation; psoriasis;
KW Parkinson's disease; Alzheimer's disease; amyotrophic lateral sclerosis;
KW uncontrolled cell growth; cancer; blood coagulation cascade; thrombosis;
KW haemorrhage; endometrial bleeding; angiogenesis; wound healing; asthma;
KW tissue repair; rheumatoid arthritis; multiple sclerosis; tissue typing;
ss.
XX
OS Homo sapiens.
XX
PN US2003044839-A1.
XX
XX 06-MAR-2003.
XX
PF 10-JUL-2001; 2001US-00902903.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065584P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109104P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
XX (GETH) GENENTECH INC.
XX
XX Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan MJ, Kljavin LJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI,
XX
XX WPI; 2003-492258/46.
DR
XX
XX Novel secreted and transmembrane polypeptides and polynucleotides
PT encoding them useful for treating abnormal bleeding involved in
PT gynecological diseases, skin diseases and neurodegenerative diseases.
PT
XX
PS Example 37; Page 107; 478pp; English.
XX
XX The invention relates to an isolated PRO polypeptide. PRO317 is useful in
CC diagnosing or treating abnormal bleeding involved in gynecological
CC diseases e.g. to avoid or lessen the need for hysterectomy. PRO317 may
CC also be useful as an agent that affects angiogenesis and PRO317 is useful
CC in anti-tumour indications or in treating coronary ischaemic conditions.
CC PRO211 and PRO217 polypeptides are useful for treating disorders
CC associated with the preservation and maintenance of gastrointestinal
CC mucosa and the repair of acute and chronic mucosal lesions, skin diseases
CC associated with abnormal keratinocyte differentiation (e.g. psoriasis).
CC PRO187 polypeptide is useful for treating Parkinson's disease,
CC Alzheimer's disease, amyotrophic lateral sclerosis (ALS), neuropathies

CC and disease related to uncontrolled cell growth, e.g. cancer. PRO219
 CC polypeptide plays a regulatory role in the blood coagulation cascade.
 CC PRO246 polypeptides which serves as tumour specific antigens may be
 CC exploited as therapeutic targets for anti-tumour drugs. PRO269
 CC polypeptide is useful as an antithrombotic agent with reduced risk for
 CC haemorrhage as compared with heparin. PRO317 polypeptide is useful in
 CC treating endometrial bleeding angiogenesis. PRO287 polypeptides and
 CC portion have therapeutic applications in wound healing and tissue repair.
 CC PRO214 polypeptides are useful for treating asthma, rheumatoid arthritis,
 CC psoriasis and multiple sclerosis. The polypeptide and its nucleic acid
 CC are useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC present sequence represents a human secreted/transmembrane PRO
 CC polypeptide PCR primer
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCCTCAGGGAG 1116
 ||||| |||||
 Db 3 GCTGTCACAGGGAG 18

RESULT 1893

ABX96205

ID ABX96205 standard; DNA; 18 BP.

XX AC ABX96205;

XX 13-MAY-2003 (first entry)

DE Human secreted/transmembrane protein, #42, PCR primer #2.

XX Human; PCR; primer; ss; PRO; secreted; transmembrane; pharmaceutical;
 KW diagnostic; biosensor; bioreactor; therapeutic; hyperplasia;
 KW endometriosis; cancer; tumour; ischaemia; coronary arterial disease;
 KW polycystic kidney disease; renal failure; inflammatory response; asthma;
 KW rheumatoid arthritis; psoriasis; multiple sclerosis; gene therapy;
 KW cytostatic; gynecological; cardiac; nephrotropic; hepatotropic;
 KW antiinflammatory.

XX Homo sapiens.

XX US2002160374-A1.

XX 31-OCT-2002.

XX 12-JUL-2001; 2001US-00905291.

XX 17-SEP-1997; 97US-0059113P.

XX 17-SEP-1997; 97US-0059115P.

XX 17-SEP-1997; 97US-0059117P.

XX 17-SEP-1997; 97US-0059119P.

XX 17-SEP-1997; 97US-0059121P.

XX 17-SEP-1997; 97US-0059122P.

XX 18-SEP-1997; 97US-0059184P.

XX 18-SEP-1997; 97US-0059263P.

XX 18-SEP-1997; 97US-0059266P.

XX 15-OCT-1997; 97US-0062125P.

XX 17-OCT-1997; 97US-0062285P.

XX 17-OCT-1997; 97US-0062287P.

XX 21-OCT-1997; 97US-0063486P.

XX 24-OCT-1997; 97US-0062814P.

XX 24-OCT-1997; 97US-0062816P.

XX 24-OCT-1997; 97US-0063045P.

XX 24-OCT-1997; 97US-0063120P.

XX 24-OCT-1997; 97US-0063121P.

PR 24-OCT-1997; 97US-0063127P.
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 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 03-NOV-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US033089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.

(GETH) GENENTECH INC.

PA Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams FM, Wood WI;
 XX WPI; 2003-288105/28.
 XX New secreted and transmembrane PRO polypeptides (e.g. PRO533 or PRO245)
 PT

PT and genes encoding them, useful for detecting or treating e.g.
PT hyperplasia, endometriosis, cancers, ischemia, coronary arterial disease
or inflammations.

XX Example 36; Page 107; 47pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. The PRO polypeptides or
CC polynucleotides are also useful as pharmaceuticals, diagnostics,
CC biosensors or bioreactors, for detecting or treating e.g. hyperplasia,
CC endometriosis, cancers (e.g. those involving solid tumours), ischaemia,
CC coronary arterial disease, polycystic kidney disease, chronic or acute
CC renal failure, or inflammatory responses (e.g. asthma, rheumatoid
CC arthritis, psoriasis or multiple sclerosis) in mammals. The PRO genes may
CC also be used in gene therapy, particularly for replacing a defective
CC gene. The sequences presented in AX96017-ABX96378 are the genes
CC encoding, the primers amplifying and the probes detecting the PRO
CC polynucleotides of the invention

SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1101 GCTGCTCTCAGGGGAG 1116

Db 3 GCTGCTCACAGGGGAG 18

RESULT 1894

ACA05526
ID ACA05526 standard; DNA; 18 BP.

XX ACA05526;

XX 29-MAY-2003 (first entry)

DE Human secreted protein PRO294 forward primer.f2.

XX Human; gene therapy; mucosal lesion; ulcer; enterocolitis; skin disease;
KW psoriasis; cancer; lung cancer; colon cancer; nerve cell disease;
KW Alzheimer's disease; Parkinson's disease; Usher syndrome; angiogenesis;
KW atrophila areata; inflammatory disease; asthma; rheumatoid arthritis;
KW ischaemia; ss; primer; PCR.

XX Homo sapiens.

XX US2003023054-A1.

XX 30-JAN-2003.

XX 16-JUL-2001; 2001US-00906742.

XX 17-SEP-1997; 97US-00591113P.

PR 17-SEP-1997; 97US-00591115P.

PR 17-SEP-1997; 97US-00591117P.

PR 17-SEP-1997; 97US-00591119P.

PR 17-SEP-1997; 97US-00591212P.

PR 17-SEP-1997; 97US-00591222P.

PR 17-SEP-1997; 97US-0059184P.

PR 18-SEP-1997; 97US-0059263P.

PR 18-SEP-1997; 97US-0059266P.

PR 15-OCT-1997; 97US-0062125P.

PR 17-OCT-1997; 97US-0062285P.

PR 17-OCT-1997; 97US-0062287P.

PR 21-OCT-1997; 97US-0063486P.

PR 24-OCT-1997; 97US-0062814P.

PR 24-OCT-1997; 97US-0062816P.

PR 24-OCT-1997; 97US-0063045P.

PR 24-OCT-1997; 97US-00631120P.
PR 24-OCT-1997; 97US-00631121P.
PR 24-OCT-1997; 97US-00631127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 27-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 25-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.

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PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX (GETH ) GENENTECH INC.
XX
XX Ashkenazi A, Botstein D, Desnovers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX WPI; 2003-331485/31.
DR
XX
XX Sixty one isolated nucleic acids encoding a PRO polypeptide, e.g. PRO245
PT or PRO1868, useful in chromosome and gene mapping, in generating
PT antisense RNA and DNA, and in treating cancer and Alzheimer's disease.
XX
XX Example 37; Page 110; 481pp; English.
XX
CC The invention relates to sixty one nucleic acids encoding PRO
CC polypeptides (secreted and transmembrane). The polynucleotide is useful
CC in molecular biology, including uses as hybridisation probes, in
CC chromosome and gene mapping, in generating antisense RNA and DNA, and in
CC gene therapy. The polynucleotide may also be used in preparing PRO
CC polypeptides by recombinant techniques, and in generating either
CC transgenic animals or knock-out animals which, in turn, are useful in the
CC development and screening of therapeutically useful reagents. The PRO
CC polypeptide or the antibody is used in preparing a medicament for
CC treating a condition responsive to the polypeptide or antibody, such as
CC mucosal lesions e.g. ulcers and enterocolitis, skin disease e.g.
CC psoriasis, cancer e.g. lung cancer and colon cancer, nerve cell disease
CC e.g. Alzheimer's disease and Parkinson's disease, Usher syndrome,
CC atrophla areata, angiogenesis, inflammatory disease e.g asthma and
CC rheumatoid arthritis, ischaemia, and in various diagnostic assays. The
CC present sequence represents an PCR primer used in isolating a PRO
CC polypeptide
XX
XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1101 GCTGTCCTCAGGGGAG 1116
Db 3 GCTGTCCACAGGGGAG 18
|||||
|||||
RESULT 1895
ACD20193
ID ACD20193 standard; DNA; 18 BP.
XX
XX ACD20193;
XX
XX 25-AUG-2003 (first entry)
XX
XX Human secreted / transmembrane polypeptide PRO294 forward primer.f2.
XX
XX Human; ss; PCR; primer; gene therapy; tumour; tissue typing; obesity;
KW diabetes; hypoinsulinaemia; hyperinsulinaemia; vascular permeability;
KW cardiac insufficiency disorder; immune response; regeneration; cartilage;
KW auditory hair cell; hearing loss; bone disorder; sports injury;
KW arthritis.
XX
XX Homo sapiens.
XX
XX US2003036060-A1.
XX
XX 20-FEB-2003.
XX
XX 12-JUL-2001; 2001US-00904859.
XX
XX 17-SEP-1997; 97US-0059113P.
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PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007177.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.
 XX (GETH) GENENTECH INC.
 PA Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerbasi H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Klijavin LG;
 PI Mather JP, Pan J, Poni NP, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2003-417923/39.
 XX Novel secreted and transmembrane polypeptide for modulating biological
 PT activity of cell expressing the polypeptide, identifying agonists or
 PT antagonists of polypeptide, and as molecular weight markers.
 XX Example 37; Page 106; 469pp; English.
 PS
 XX The invention relates to an isolated, secreted and transmembrane
 CC polypeptide, termed PRO polypeptide. The polypeptide is useful for
 CC identifying agonists or antagonists of the polypeptide, for preparing
 CC variants of the polypeptide, as molecular weight markers for protein
 CC electrophoresis purpose and the nucleic acid is useful for recombinantly
 CC expressing those markers. The polypeptide is also useful as therapeutic
 CC agent. PRO is useful in assays to identify other proteins or molecules
 CC involved in binding interaction. The nucleic acid is useful as
 CC hybridisation probes, in chromosome and gene mapping, in generation of
 CC antisense RNA and DNA, in the preparation of PRO polypeptide, for
 CC generating transgenic animals or knockout animals which in turn are
 CC useful in the development and screening of therapeutically useful
 CC reagents, to construct hybridisation probes for mapping the gene which
 CC encodes the PRO and for the genetic analysis of individuals with genetic
 CC disorders, in gene therapy, for chromosome identification, as chromosome
 CC marker, and for generating probes for polymerase chain reaction (PCR),
 CC Northern analysis, Southern analysis and Western analysis. PRO antibody
 CC is useful in diagnostic assays for PRO, e.g. detecting its expression in
 CC specific cells, tissues or serum and for affinity purification of PRO
 CC from recombinant cell culture or natural sources. The polypeptide or its
 CC antibody is useful for the preparation of medicament for treating
 CC conditions which is responsive to the PRO polypeptide or anti-PRO
 CC antibody e.g. tumour. The polypeptide and the nucleic acid is useful for
 CC tissue typing. The polypeptide is useful for treating obesity, diabetes
 CC or hypo- or hyper-insulinaemia and cardiac insufficiency disorders, for
 CC inhibiting tumour growth, enhances vascular permeability and immune
 CC response, for inducing regeneration of auditory hair cells and for
 CC treating hearing loss in mammals and for treating bone and/or cartilage
 CC disorders such as sports injuries and arthritis. The present sequence
 CC represents a human secreted and transmembrane PRO polypeptide PCR primer
 XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCTCAGGGGAG 1116
 ||||| |||||

Db 3 GCTGTCTCAGGGGAG 18
 RESULT 1896
 ABX11857
 ID ABX11857 standard; DNA; 18 BP.
 XX
 AC ABX11857;
 XX
 DT 10-MAY-2003 (first entry)
 XX
 DE Human muscarinic acetylcholine receptor 6 antisense oligonucleotide #4.
 XX
 KW Human; ss; mAChR-6; muscarinic acetylcholine receptor-6;
 KW cognitive disorder; amnesia; amnesic spatial disorientation;
 KW Kluver-Bucy syndrome; Alzheimer's related memory loss; antisense;
 KW learning disability; consciousness disorder; visual hallucination;
 KW delirium; schizo-affective disorder; schizophrenia; depression;
 KW affective disorder; sleep disorders; pain generation disorder;
 KW irritable bowel syndrome; chest pain; movement disorder;
 KW Parkinson's disease; eating disorder; insulin hypersecretion obesity;
 KW heart muscle disorder; bradycardia; tachycardia; arrhythmia; flutter;
 KW fibrillation; gland related disorder; xerostomia; diabetes mellitus.
 XX
 OS Homo sapiens.
 XX
 PN US2002166131-A1.
 XX
 PD 07-NOV-2002.
 XX
 PF 08-JUL-1999; 99US-00349755.
 XX
 PR 04-DEC-1997; 97US-00985090.
 PR 17-MAR-1998; 98US-00042780.
 XX
 XX (MILL-) MILLENNIUM PHARM INC.
 XX
 PI Goodearl ADJ, Gluckmann MA;
 XX WPI; 2003-298709/29.
 XX
 PT New muscarinic acetylcholine receptor 6 (mAChR-6) nucleic acids and
 PT proteins, useful for modulating acetylcholine or phosphatidylinositol,
 PT particularly for treating e.g. schizophrenia, chest pain, tachycardia or
 PT arrhythmia.
 XX
 PS Disclosure; Page 26; 66pp; English.
 XX
 CC The invention relates to an isolated human or rat muscarinic
 CC acetylcholine receptor 6 (mAChR-6) nucleic acid molecule and the encoded
 CC protein. Also included are (non-human) host cells comprising the mAChR-6
 CC nucleic acid molecule, an antibody that selectively binds the polypeptide
 CC above, a method for producing the polypeptide by culturing the host cell
 CC such that the mAChR-6 nucleic acid is expressed, a method for detecting
 CC the presence of the mAChR-6 polypeptide and nucleic acid, a method for
 CC identifying a compound that binds to the mAChR-6 polypeptide and a method
 CC for modulating the activity of the mAChR-6 polypeptide. The mAChR-6
 CC polynucleotide, polypeptide, antibody or modulator are useful in drug
 CC screening assays, diagnostic assays for identifying diseases, allelic
 CC screening, pharmacogenetic testing, methods of treatment,
 CC pharmacogenomics or monitoring the effects during clinical trials. In
 CC particular, the mAChR-6 polynucleotide, polypeptide or antibody is useful
 CC for treating or diagnosing cognitive disorders (e.g. amnesia, amnesic
 CC spatial disorientation, Kluver-Bucy syndrome, Alzheimer's related memory
 CC loss or learning disability), disorders affecting consciousness (e.g.
 CC visual hallucinations or delirium), schizo-affective disorders (e.g.
 CC schizophrenia or depression), affective disorders (e.g. sleep disorders),
 CC disorders affecting pain generation mechanisms (e.g. pain related to
 CC irritable bowel syndrome, or chest pain), movement disorders (e.g.
 CC Parkinson's disease), eating disorders (e.g. insulin hypersecretion
 CC obesity), heart muscle related disorders (e.g. bradycardia, tachycardia,
 CC arrhythmia, flutter or fibrillation), or gland related disorder (e.g.
 CC xerostomia or diabetes mellitus). The present sequence is an antisense

XX Example 37; Page 101; 473pp; English.

XX The invention describes sixty one nucleic acids encoding PRO polypeptides

CC (secreted and transmembrane). The PRO polypeptides and nucleic acids are

CC useful in diagnosing or treating enterocolitis, gastrointestinal

CC ulceration, skin diseases associated with abnormal keratinocyte

CC differentiation, e.g. psoriasis or epithelial cancers such as squamous

CC cell carcinoma, Alzheimer's disease, Parkinson's disease, amyotrophic

CC lateral sclerosis, inflammatory diseases, e.g. rheumatoid arthritis,

CC asthma or multiple sclerosis, organ failure, atherosclerosis, cardiac

CC injury, infertility, birth defects, premature aging, AIDS, cancer, and

CC diabetic complications, or mutations in general. The polypeptides are

CC also useful for wound repair and associated therapies concerned with re-

CC growth of tissue. The PRO polypeptides and nucleic acid molecules are

CC also useful in gene therapy, and as molecular weight markers for protein

CC electrophoresis purposes. The anti-PRO antibodies may be used in

CC diagnostic assays for PRO, or for the affinity purification of PRO from

CC recombinant cell culture or natural sources. This sequence represents a

CC novel human PRO polypeptide associated primer

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

XX Query Match 0.4%; Score 14.4; DB 1; Length 18;

PS Best Local Similarity 93.8%; Pred. No. 1.7e+03;

PS Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGCTCTCAGGGGAG 1116

DB 3 GCTGTCACAGGGGAG 18

RESULT 1898

ABZ81168/c

ID ABZ81168 standard; DNA; 18 BP.

XX AC ABZ81168;

XX 10-MAY-2003 (first entry)

XX Human GPR50 SNP 1804 PCR primer SEQ ID NO:26.

XX Human; G protein-coupled receptor; receptor; GPR50; allelic variant;

KW polymorphic site; nootropic; neuroprotective; anticonvulsant; anorectic;

KW hypotensive; cardiant; thrombolytic; antiarteriosclerotic; osteopathic;

KW antichemagic; antiarthritic; antiinflammatory; antiinfertility;

KW psychiatric disorder; bipolar affective disorder; unipolar depression;

KW depression; schizophrenia; anxiety; neurological disorder; obesity;

KW insomnia; addiction; neurodegeneration; hypotension; hypertension;

KW acute heart failure; atherothrombosis; atherosclerosis; osteoporosis;

KW rheumatoid arthritis; infertility; single nucleotide polymorphism; SNP;

KW PCR primer; ss.

XX OS Homo sapiens.

XX WO2003006504-A2.

XX 23-JAN-2003.

XX 08-JUL-2002; 2002WO-EP007639.

XX 13-JUL-2001; 2001EP-00202690.

XX (ALKU) AKZO NOBEL NV.

XX Thomson AM, Dunbar DR;

XX WPI; 2003-221719/21.

XX New polynucleotides encoding GPR50 receptor proteins and having at least

PT one polymorphic site, useful for screening for GPR50 modulators for

PT treating psychiatric disorders, e.g. bipolar affective disorder or

PT unipolar depression.

XX Example 7; Page 20; 84pp; English.

XX The present invention describes a polynucleotide sequence (I) which

CC encodes a G protein-coupled receptor designated GPR50 and has at least

CC one polymorphic site. Also described are GPR50 allelic variant

CC polynucleotide sequences (ABZ81152 to ABZ81158) which encode the proteins

CC given in ABR39074 to ABR39080. (I) has nootropic, neuroprotective,

CC anticonvulsant, anorectic, hypotensive, cardiant, thrombolytic,

CC antiarteriosclerotic, osteopathic, antiinflammatory, antiarthritic,

CC antiinflammatory and antiinfertility activities. Polynucleotides,

CC polypeptides and expression vectors from the present invention can be

CC used in screening assays for identifying new drugs, and screening for

CC GPR50 modulators for preparing a medicament for treating psychiatric

CC disorders, e.g. bipolar affective disorder or unipolar depression. They

CC are also useful for correcting, preventing or ameliorating depression,

CC schizophrenia, anxiety, neurological disorder, obesity, insomnia

CC addition, neurodegeneration, hypotension, hypertension, acute heart

CC failure, atherothrombosis, atherosclerosis, osteoporosis, rheumatoid

CC arthritis and infertility. The present sequence represents a PCR primer

CC used to amplify the single nucleotide polymorphism (SNP) 1804 of human

CC GPR50, which is used in an example from the present invention

XX Sequence 18 BP; 7 A; 5 C; 1 G; 5 T; 0 U; 0 Other;

XX Query Match 0.4%; Score 14.4; DB 1; Length 18;

PS Best Local Similarity 93.8%; Pred. No. 1.7e+03;

PS Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1356 GATGATGAAGATGATC 1371

DB 16 GATGTTGAAGATGATC 1

RESULT 1899

ACD19831

ID ACD19831 standard; DNA; 18 BP.

XX AC ACD19831;

XX 22-AUG-2003 (first entry)

XX Human secreted / transmembrane polypeptide PRO294 forward primer.f2.

XX Human; ss; PCR; primer; gene therapy; apoptosis; bleeding; tumour; ALS;

KW gynaecological disease; hysterectomy; angiogenesis; skin disease; cancer;

KW coronary ischaemic condition; gastrointestinal mucosa disorder; asthma;

KW mucosal lesion repair; keratinocyte differentiation; psoriasis;

KW Parkinson's disease; Alzheimer's disease; amyotrophic lateral sclerosis;

KW neuropathy; blood coagulation cascade disorder; thrombosis; haemorrhage;

KW neurodegenerative disease; endometrial bleeding; wound healing;

KW tissue repair; rheumatoid arthritis; multiple sclerosis; tissue typing.

XX OS Homo sapiens.

XX US2003027143-A1.

XX 06-FEB-2003.

XX 16-JUL-2001; 2001US-00906838.

XX 17-SEP-1997; 97US-0059113P.

XX 17-SEP-1997; 97US-0059115P.

XX 17-SEP-1997; 97US-0059117P.

XX 17-SEP-1997; 97US-0059119P.

XX 17-SEP-1997; 97US-0059121P.

XX 17-SEP-1997; 97US-0059122P.

XX 17-SEP-1997; 97US-0059184P.

XX 18-SEP-1997; 97US-0059263P.

XX 18-SEP-1997; 97US-0059266P.

XX 15-OCT-1997; 97US-0062125P.

XX 17-OCT-1997; 97US-0062285P.

XX 17-OCT-1997; 97US-0062287P.

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PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063411P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 28-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 03-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065869P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 14-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98US-01003177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 13-SEP-1999; 99WO-US020594.
PR 18-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 29-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030511.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.

PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH ) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N,
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
XX WPI; 2003-417249/39.
XX
XX Novel secreted and transmembrane polypeptides and polynucleotides
XX encoding them useful for treating abnormal bleeding involved in
XX gynecological diseases, skin diseases and neurodegenerative diseases.
XX
XX Example 37; Page 101; 467pp; English.
XX
XX The invention relates to an isolated secreted and transmembrane PRO
XX polypeptide. The PRO polypeptides are useful for modulating biological
XX activity of a cell, in diagnosing or treating abnormal bleeding involved
XX in gynaecological diseases e.g. to avoid or lessen the need for
XX hysterectomy, for treating angiogenesis, tumour, coronary ischaemic
XX condition, disorders associated with the preservation and maintenance of
XX gastrointestinal mucosa and the repair of acute and chronic mucosal
XX lesions, skin diseases associated with abnormal keratinocyte
XX differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
XX disease, amyotrophic lateral sclerosis (ALS), neuropathies, disease
XX related to uncontrolled cell growth (e.g. cancer), blood coagulation
XX cascade disorders, neurodegenerative disease, thrombosis, haemorrhage,
XX endometrial bleeding, wound healing, tissue repair, asthma, rheumatoid
XX arthritis, multiple sclerosis. Nucleic acid encoding PRO polypeptides are
XX useful in molecular biology including uses as hybridisation probes and in
XX the generation of antisense RNA and DNA, for preparing PRO polypeptides,
XX for generating transgenic animals or knockout animals. The PRO
XX polypeptides and their nucleic acids are useful for tissue typing. PRO
XX antibodies are useful for immunohistochemical staining and/or assay of
XX sample fluids. Anti-PRO antibodies are useful in diagnostic assays for
XX PRO e.g. detecting its expression in specific cells, tissues or serum and
XX for affinity purification of PRO from recombinant cell culture or natural
XX sources. The present sequence represents a human secreted and
XX transmembrane PRO polypeptide PCR primer
XX
XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.4; DB 1; Length 18;
XX Best Local Similarity 93.8%; Pred. No. 1.7e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 1101 GCTGTCTCTCAGGGGAG 1116
XX ||||| |||||
Db 3 GCTGTCTCAGGGGAG 18
XX
RESULT 1900
ADBE29434
ID ADB29434 standard; DNA; 18 BP.
XX
XX ADB29434;
XX
XX ADB29434;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human secreted/transmembrane protein, #44, PCR primer #2.
XX
XX Human; PCR; primer; ss; PRO; secreted; transmembrane;
XX gastrointestinal mucosa; mucosal lesion; skin disease;
XX keratinocyte differentiation; psoriasis; Parkinson's disease;
XX Alzheimer's diseases; amyotrophic lateral sclerosis; ALS; neuropathy;
```

KW cell growth; cancer; tumour; viral infection; neurodegenerative disease;
KW antithrombotic agent; haemorrhage; endometrial bleeding angiogenesis;
KW kidney tissue; apoptosis; therapeutic; tissue typing;
KW immunohistochemical staining; gene therapy; neuroprotective;
XX cytostatic; virucide; anticoagulant.

OS Homo sapiens.

XX US2003092002-A1.

XX 15-MAY-2003.

XX 10-JUL-2001; 2001US-00902615.

XX 17-SEP-1997; 97US-0059113P.

PR 17-SEP-1997; 97US-0059115P.

PR 17-SEP-1997; 97US-0059117P.

PR 17-SEP-1997; 97US-0059119P.

PR 17-SEP-1997; 97US-0059121P.

PR 17-SEP-1997; 97US-0059122P.

PR 17-SEP-1997; 97US-0059184P.

PR 18-SEP-1997; 97US-0059263P.

PR 18-SEP-1997; 97US-0059266P.

PR 18-SEP-1997; 97US-0062125P.

PR 17-OCT-1997; 97US-0062285P.

PR 17-OCT-1997; 97US-0062287P.

PR 21-OCT-1997; 97US-0063486P.

PR 24-OCT-1997; 97US-0062814P.

PR 24-OCT-1997; 97US-0062816P.

PR 24-OCT-1997; 97US-0063045P.

PR 24-OCT-1997; 97US-0063120P.

PR 24-OCT-1997; 97US-0063121P.

PR 24-OCT-1997; 97US-0063127P.

PR 24-OCT-1997; 97US-0063128P.

PR 27-OCT-1997; 97US-0063327P.

PR 27-OCT-1997; 97US-0063329P.

PR 28-OCT-1997; 97US-0063341P.

PR 28-OCT-1997; 97US-0063342P.

PR 28-OCT-1997; 97US-0063344P.

PR 28-OCT-1997; 97US-0063349P.

PR 28-OCT-1997; 97US-0063550P.

PR 28-OCT-1997; 97US-0063564P.

PR 28-OCT-1997; 97US-0063435P.

PR 29-OCT-1997; 97US-0063704P.

PR 29-OCT-1997; 97US-0063732P.

PR 29-OCT-1997; 97US-0063734P.

PR 29-OCT-1997; 97US-0063735P.

PR 29-OCT-1997; 97US-0063738P.

PR 13-OCT-1998;

PR 20-NOV-1998;

PR 01-DEC-1998;

PR 22-DEC-1998;

PR 07-JUL-1999;

PR 26-JUL-1999;

PR 08-SEP-1999;

PR 13-SEP-1999;

PR 15-SEP-1999;

PR 05-OCT-1999;

PR 29-NOV-1999;

PR 01-DEC-1999;

PR 02-DEC-1999;

PR 16-DEC-1999;

PR 20-DEC-1999;

PR 20-DEC-1999;

PR 05-JAN-2000;

PR 11-FEB-2000;

PR 22-FEB-2000;

PR 24-FEB-2000;

PR 02-MAR-2000;

PR 20-MAR-2000;

PR 30-MAR-2000;

PR 22-MAY-2000;

PR 02-JUN-2000;

PR 28-JUL-2000;

PR 24-AUG-2000;

PR 18-SEP-2000;

XX (GETH) GENENTECH INC.

XX Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;

PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;

PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;

PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;

PI Williams PM, Wood WI;

XX WPI; 2003-765473/72.

XX Novel isolated native PRO polypeptide useful for treating Parkinson's

PT disease, enterocolitis, Zollinger-Ellison syndrome gastrointestinal

PT ulceration, Alzheimer's disease, amyotrophic lateral sclerosis, Usher

PT syndrome.

XX Example 36; Page 98; 469pp; English.

PS The invention discloses isolated PRO secreted/transmembrane polypeptides

XX and the nucleic acid encoding them. The polypeptides can be used to raise

CC antibodies that specifically bind to the PRO polypeptide, for linking a

CC bioactive molecule to a cell expressing a PRO protein and for modulating

CC at least one biological activity of a cell. PRO polypeptides are useful

CC for detecting other PRO polypeptides in a sample and for linking a

CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO

CC polypeptide antibodies are useful for modulating the biological activity

CC of a cell expressing PRO polypeptides. PRO polypeptides are also useful

CC for treating disorders associated with the preservation and maintenance

CC of gastrointestinal mucosa and the repair of acute and chronic mucosal

CC lesions, skin diseases associated with abnormal keratinocyte

CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's

CC diseases, amyotrophic lateral sclerosis (ALS), neuropathies and

CC additionally, disease related to uncontrolled cell growth, e.g. cancer.

CC PRO polypeptides also serves as tumour specific antigens which may be

CC exploited as therapeutic targets for anti-tumour drugs, and are also

CC employed therapeutically in vivo for lessening the effects of viral

CC infection. The PRO polypeptides can be also used in assays to determine

CC if it has a role in neurodegenerative diseases or their reversal, as an

CC antithrombotic agent with reduced risk for hemorrhage as compared with

CC heparin, in treating other PRO-associated disorders, in modulating

CC endometrial bleeding angiogenesis, and may also have an effect on kidney

CC tissue. PRO polypeptides and their portions affect the expression of
 CC genes which have a role in apoptosis. The polynucleotides are useful in
 CC molecular biology including uses as hybridisation probes for cDNA library
 CC to isolate the full-length PRO cDNA or to isolate other cDNAs, in
 CC chromosome and gene mapping, in the generation of antisense RNA and DNA,
 CC for preparing PRO polypeptides, for generating transgenic animals or
 CC knockout animals which are useful in the development and screening of
 CC therapeutically useful reagents, as probes and for the genetic analysis
 CC of individuals with genetic disorders as well as for recombinantly
 CC expressing the protein and for chromosome identification. The proteins
 CC are useful as molecular marker for protein electrophoresis purposes, as
 CC therapeutic agents, for screening compounds to identify those that mimic
 CC the PRO polypeptide (agonists) or prevent the effect of the PRO
 CC polypeptide (antagonists). The polynucleotides and proteins are useful
 CC for tissue typing. PRO antibodies are useful for immunohistochemical
 CC staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
 CC diagnostic assays for PRO e.g. detecting its expression in specific
 CC cells, tissues or serum and for affinity purification of PRO from
 CC recombinant cell culture or natural sources. The PRO genes may also be
 CC used in gene therapy, particularly for replacing a defective gene. The
 CC sequence presented is a PCR primer which was used to amplify a PRO
 CC polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1101 GCTGTCCTCAGGGGAG 1116
 |||||
 Db 3 GCTGTCACAGGGGAG 18

RESULT 1901

ADA18290

ID ADA18290 standard; DNA; 18 BP.

XX AC ADA18290;

XX DT 20-NOV-2003 (first entry)

XX DE Human secreted/transmembrane protein, #44, PCR primer #2.

XX KW Human; PCR; primer; ss; PRO; secreted; transmembrane;
 KW gastrointestinal mucosa; mucosal lesion; skin disease;
 KW keratinocyte differentiation; psoriasis; Parkinson's disease;
 KW Alzheimer's diseases; amyotrophic lateral sclerosis; ALS; neuropathy;
 KW cell growth; cancer; tumour; viral infection; neurodegenerative disease;
 KW antithrombotic agent; haemorrhage; endometrial bleeding angiogenesis;
 KW kidney tissue; apoptosis; therapeutic; tissue typing;
 KW immunohistochemical staining; gene therapy; neuroprotective;
 KW cytoskeletal; virucide; anticoagulant.

XX OS Homo sapiens.

XX PN US2003039971-A1.

XX PD 27-FEB-2003.

XX PF 16-JUL-2001; 2001US-00906646.

XX PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 18-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.

PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063272P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.

PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 10-SEP-1998; 98WO-US0118824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 14-SEP-1998; 98WO-US013177.
 PR 16-SEP-1998; 98WO-US013330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 08-SEP-1999; 99US-0146222P.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.
 PA (GETH) GENENTECH INC.
 XX Ashkenazi A, Botstein D, Desnovers L, Eaton DL, Ferrara N;
 XX Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin LJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2003-512316/48.
 XX
 XX New genes and secreted and transmembrane polypeptides (e.g. PRO245 or
 PT PRO1868), useful for treating or diagnosing e.g. cancers,
 PT atherosclerosis, infertility, stroke, AIDS or multiple sclerosis in
 PT mammals.
 XX
 PS Example 37; Page 103; 476pp; English.
 XX
 XX The invention relates to an isolated nucleic acid molecule comprising a
 CC sequence with at least 80% identity to: (a) a nucleotide encoding any of
 CC 61 PRO (secreted and transmembrane protein) polypeptides appearing as
 CC ABO32756-ABO32816; or (b) any of 61 nucleotide sequences having 50-4053bp

CC fully defined in the specification; or the full length coding sequence of
 CC any these 61 nucleotide sequences. Also included are the isolated PRO
 CC polypeptide (lacking its associated signal peptide or an extracellular
 CC domain of the PRO polypeptide, with or lacking its associated signal
 CC peptide), a vector comprising the nucleic acid molecule, a host cell
 CC comprising the vector (used to produce the PRO polypeptide), a chimeric
 CC molecule comprising the PRO polypeptide fused to a heterologous amino
 CC acid sequence, an anti-PRO antibody, detecting PRO245 or PRO1868
 CC polypeptide in a sample suspected of containing any of these PRO
 CC polypeptides, linking a bioactive molecule to a cell expressing a PRO245
 CC or PRO1868 polypeptide and modulating at least one biological activity of
 CC a cell expressing the PRO245 or PRO1868 polypeptide. The PRO polypeptides
 CC or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors
 CC or bioreactors. These are particularly useful for diagnosing or treating
 CC e.g. inflammations, rheumatoid arthritis, psoriasis, multiple sclerosis,
 CC atherosclerosis, infertility, birth defects, premature aging, malignancy
 CC (e.g. cancers), strokes, heart attacks, hypertension, gastrointestinal
 CC ulcerations, Parkinson's diseases, Alzheimer's disease, or AIDS in
 CC mammals. These are also useful for modulating cholesterol uptake in the
 CC body, and in wound healing or tissue repair. The PRO polypeptides are
 CC useful in drug screening. The PRO polypeptides are also useful as
 CC molecular weight markers, or for chromosome identification. The PRO genes
 CC are useful as hybridisation probes, or for screening libraries of human
 CC cDNA, genomic DNA or mRNA. The PRO genes may also be used in gene
 CC therapy, particularly for replacing a defective gene. The present
 CC sequence is an oligonucleotide (PCR primer or probe) used in the
 CC isolation of a PRO cDNA
 XX
 XX Sequence 18 BP; 3 A; 5 G; 7 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCTCTCAGGGGAG 1116
 DB 3 GCTGTCCACAGGGGAG 18
 |||||
 |||||
 RESULT 1903
 ACD83139
 ID ACD83139 standard; DNA; 18 BP.
 XX
 AC ACD83139;
 DT 22-SEP-2003 (first entry)
 XX
 DE Human PRO PCR primer #104.
 XX
 KW Human; PRO; primer; ss; secreted polypeptide; transmembrane polypeptide;
 KW abnormal bleeding; gynaecological disease; hysterectomy; mucosal lesion;
 KW coronary ischaemic condition; gastrointestinal mucosa; skin disease; ALS;
 KW keratinocyte differentiation; psoriasis; Parkinson's disease; asthma;
 KW Alzheimer's disease; rheumatoid arthritis; multiple sclerosis; cancer;
 KW amyotrophic lateral sclerosis; neuropathy; uncontrolled cell growth; PCR.
 XX Homo sapiens.
 OS
 XX US2003044793-A1.
 PN
 XX
 XX 06-MAR-2003.
 PD
 XX
 XX 11-JUL-2001; 2001US-00903786.
 PF
 XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.

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PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 28-OCT-1997; 97US-0063565P.
PR 28-OCT-1997; 97US-0063704P.
PR 28-OCT-1997; 97US-0063732P.
PR 28-OCT-1997; 97US-0063734P.
PR 28-OCT-1997; 97US-0063735P.
PR 28-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 31-OCT-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065593P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 14-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US019824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 17-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.

PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
XX (GETH ) GENENTECH INC.
XX
XX Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
XX Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
XX Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
XX Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
XX Williams PM, Wood WI;
XX WPI; 2003-492256/46.
XX
XX Novel secreted and transmembrane PRO polypeptides and polynucleotides
XX encoding them, useful for treating abnormal bleeding involved in
XX gynecological diseases, skin diseases and neurodegenerative diseases.
XX
XX Example 37; Page 103; 475pp; English.
XX
XX The invention relates to human PRO polypeptides (secreted and
XX transmembrane polypeptides) and the PRO polynucleotides encoding them.
XX The PRO polypeptides and polynucleotides can be used in diagnosing or
XX treating abnormal bleeding involved in gynaecological diseases e.g. to
XX avoid or lessen the need for hysterectomy. They can also be used in
XX treating coronary ischaemic conditions, disorders associated with the
XX preservation and maintenance of gastrointestinal mucosa and the repair of
XX acute and chronic mucosal lesions, skin diseases associated with abnormal
XX keratinocyte differentiation (e.g. psoriasis), Parkinson's disease,
XX Alzheimer's disease, asthma, rheumatoid arthritis, multiple sclerosis,
XX amyotrophic lateral sclerosis (ALS), neuropathies and diseases related to
XX uncontrolled cell growth, such as cancer. This sequence represents a PCR
XX primer used to isolate a human PRO polynucleotide of the invention
XX
XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.4; DB 1; Length 18;
XX Best Local Similarity 93.8%; Pred. NO. 1.7e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 1101 GCTGTCCTCAGGGGAG 1116
XX |||||
XX 3 GCTGTCACAGGGGAG 18
XX
XX RESULT 1904
XX ADA16265
XX ID ADA16265 standard; DNA; 18 BP.
XX
XX AC ADA16265;
XX
XX DT 06-NOV-2003 (first entry)
XX
XX Human secreted/transmembrane protein, #44, PCR primer #2.
XX
XX Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
XX tissue typing; immunohistochemical staining; gene therapy;
XX neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
XX endothelial cell; stimulated T-lymphocyte; retinal neuron;
XX rod photoreceptor cell; c-fos; glucose; PFA; chondrocyte;
XX cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
XX retinitis pigmentosa; obesity; diabete; hyperinsulinaemia;
XX hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
XX arthritis; cardiac; vulnerary; cytostatic; ophthalmological;
XX osteopathic; antiarthritic; anorectic.
XX
XX Homo sapiens.
XX
XX OS
```


CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCCTCAGGGGAG 1116
 ||||| |||||
 Db 3 GCTGTCCACAGGGGAG 18

RESULT 1905

ADA42410

ID ADA42410 standard; DNA; 18 BP.

XX AC ADA42410;

XX DT 20-NOV-2003 (first entry)

XX DE Human secreted/transmembrane protein, #44, PCR primer #2.

XX KW Human; PCR; primer; ss; PRO; secreted; transmembrane;

XX KW Gastrointestinal mucosa; mucosal lesion; skin disease;

XX KW keratinocyte differentiation; psoriasis; Parkinson's disease;

XX KW Alzheimer's diseases; amyotrophic lateral sclerosis; ALS; neuropathy;

XX KW cell growth; cancer; tumour; viral infection; neurodegenerative disease;

XX KW antithrombotic agent; haemorrhage; endometrial bleeding angiogenesis;

XX KW kidney tissue; apoptosis; therapeutic; tissue typing; neuroprotective;

XX KW immunohistochemical staining; gene therapy; nontropic; neuroprotective;

XX KW cytostatic; virucide; anticoagulant.

XX OS Homo sapiens.

XX PN US2003054401-A1.

XX PD 20-MAR-2003.

XX PF 11-JUL-2001; 2001US-00903520.

XX PR 17-SEP-1997; 97US-0059113P.

XX PR 17-SEP-1997; 97US-0059115P.

XX PR 17-SEP-1997; 97US-0059117P.

XX PR 17-SEP-1997; 97US-0059119P.

XX PR 17-SEP-1997; 97US-0059121P.

XX PR 17-SEP-1997; 97US-0059122P.

XX PR 17-SEP-1997; 97US-0059184P.

XX PR 18-SEP-1997; 97US-0059263P.

XX PR 18-SEP-1997; 97US-0059266P.

XX PR 15-OCT-1997; 97US-0062125P.

XX PR 17-OCT-1997; 97US-0062285P.

XX PR 17-OCT-1997; 97US-0062287P.

XX PR 21-OCT-1997; 97US-0063486P.

XX PR 24-OCT-1997; 97US-0062814P.

XX PR 24-OCT-1997; 97US-0063045P.

XX PR 24-OCT-1997; 97US-0063120P.

XX PR 24-OCT-1997; 97US-0063121P.

XX PR 24-OCT-1997; 97US-0063127P.

XX PR 24-OCT-1997; 97US-0063128P.

PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065946P.
 PR 18-NOV-1997; 97US-0065933P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 08-DEC-1999; 99WO-US020594.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.

(GETH) GENENTECH INC.

PA

XX Ashkenazi A, Botstein D, Desnovers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin ID;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2003-755054/71.
 XX Novel PRO polypeptides useful for treating Parkinson's disease,
 PT Alzheimer's disease, enterocolitis, Zollinger-Ellison syndrome,
 PT psoriasis, epidermoid carcinoma of the vulva and gliomas, gynecological
 PT diseases.
 XX Example 36; SEQ ID NO 229; 479pp; English.
 XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. PRO polypeptides are also useful
 CC for treating disorders associated with the preservation and maintenance
 CC of gastrointestinal mucosa and the repair of acute and chronic mucosal
 CC lesions, skin diseases associated with abnormal keratinocyte
 CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
 CC diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
 CC additionally, disease related to uncontrolled cell growth, e.g. cancer.
 CC PRO polypeptides also serve as tumour specific antigens which may be
 CC exploited as therapeutic targets for anti-tumour drugs, and are also
 CC employed therapeutically in vivo for lessening the effects of viral
 CC infection. The PRO polypeptides can be also used in assays to determine
 CC if it has a role in neurodegenerative diseases or their reversal, as an
 CC antithrombotic agent with reduced risk for haemorrhage as compared with
 CC heparin, in treating other PRO-associated disorders, in modulating
 CC endometrial bleeding angiogenesis, and may also have an effect on kidney
 CC tissue. PRO polypeptides and their portions affect the expression of
 CC genes which have a role in apoptosis. The polynucleotides are useful in
 CC molecular biology including uses as hybridisation probes for cDNA library
 CC to isolate the full-length PRO cDNA or to isolate other cDNAs, in
 CC chromosome and gene mapping, in the generation of antisense RNA and DNA,
 CC for preparing PRO polypeptides, for generating transgenic animals or
 CC knockout animals which are useful in the development and screening of
 CC therapeutically useful reagents, as probes and for the genetic analysis
 CC of individuals with genetic disorders as well as for recombinantly
 CC expressing the protein and for chromosome identification. The proteins
 CC are useful as molecular marker for protein electrophoresis purposes, as
 CC therapeutic agents, for screening compounds to identify those that mimic
 CC the PRO polypeptide (agonists) or prevent the effect of the PRO
 CC polypeptide (antagonists). The polynucleotides and proteins are useful
 CC for tissue typing. PRO antibodies are useful for immunohistochemical
 CC staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
 CC diagnostic assays for PRO e.g. detecting its expression in specific
 CC cells, tissues or serum and for affinity purification of PRO from
 CC recombinant cell culture or natural sources. The PRO genes may also be
 CC used in gene therapy, particularly for replacing a defective gene. The
 CC sequence presented is a PCR primer which was used to amplify a PRO
 CC polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCTCTCAGGGGAG 1116
 DB 3 GCTGTCCACAGGGGAG 18

RESULT 1906
 ACD23317
 ID ACD23317 standard; DNA; 18 BP.
 XX ACD23317;
 AC ACD23317;
 XX DT 26-AUG-2003 (first entry)
 XX Human PRO PCR primer #96.
 DE Human; PRO; primer; ss; Parkinson's disease; Alzheimer's disease; ALS;
 XX amyotrophic lateral sclerosis; neuropathy; cancer; viral infection; AIDS;
 KW Usher's syndrome; haemorrhage; enterocolitis; Zollinger-Ellison syndrome;
 KW gastrointestinal ulceration; congenital microvillus atrophy; psoriasis;
 KW skin disease; endometrial bleeding; angiogenesis; ischaemic condition;
 KW asthma; rheumatoid arthritis; multiple sclerosis; inflammatory disease;
 KW atherosclerosis; infertility; birth defect; premature aging; stroke; PCR;
 KW diabetic complication.
 XX Homo sapiens.
 OS US2003064367-A1.
 PN 03-APR-2003.
 XX 13-JUL-2001; 2001US-00904485.
 XX 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0063486P.
 PR 21-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 31-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.

24-NOV-1997; 97US-0066511P.
24-NOV-1997; 97US-0066770P.
24-NOV-1997; 97US-0066772P.
25-NOV-1997; 97US-0066840P.
12-DEC-1997; 97US-0069425P.
04-JUN-1998; 98US-0088026P.
10-SEP-1998; 98US-0099803P.
10-SEP-1998; 98US-0099803P.
14-SEP-1998; 98US-0100262P.
14-SEP-1998; 98US-0100262P.
16-SEP-1998; 98US-0101917P.
17-SEP-1998; 98US-0101917P.
17-SEP-1998; 98US-0100858P.
17-SEP-1998; 98US-0101943P.
13-OCT-1998; 98US-0104080P.
20-NOV-1998; 98US-0109304P.
01-DEC-1998; 98US-0109304P.
07-JUL-1999; 98US-0113296P.
26-JUL-1999; 98US-0113296P.
26-JUL-1999; 98US-0145698P.
28-JUL-1999; 98US-0146222P.
08-SEP-1999; 99US-0146222P.
13-SEP-1999; 99US-0146222P.
15-SEP-1999; 99US-0146222P.
15-SEP-1999; 99US-0146222P.
05-OCT-1999; 99US-0146222P.
29-NOV-1999; 99US-0146222P.
30-NOV-1999; 99US-0146222P.
01-DEC-1999; 99US-0146222P.
02-DEC-1999; 99US-0146222P.
02-DEC-1999; 99US-0146222P.
16-DEC-1999; 99US-0146222P.
20-DEC-1999; 99US-0146222P.
20-DEC-1999; 99US-0146222P.
05-JAN-2000; 2000US-0000219P.
11-FEB-2000; 2000US-0000356P.
22-FEB-2000; 2000US-0000414P.
24-FEB-2000; 2000US-0000500P.
02-MAR-2000; 2000US-0000584P.
20-MAR-2000; 2000US-0000737P.
30-MAR-2000; 2000US-0000843P.
22-MAY-2000; 2000US-010402P.
02-JUN-2000; 2000US-010402P.
24-JUL-2000; 2000US-010402P.
24-AUG-2000; 2000US-010402P.
18-SEP-2000; 2000US-0066535P.
(GETH) GENENTECH INC.
Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tamas D;
Williams PM, Wood WI;
WPI; 2003-567176/53.
Novel isolated PRO polypeptides e.g. PRO245 and PRO1868, useful for
treating e.g. Parkinson's disease, Alzheimer's disease, amyotrophic
lateral sclerosis, cancer, neuropathies, diabetes and psoriasis.
Example 37; Page 103; 477pp; English.
The invention relates to human PRO polypeptides and the polynucleotides
encoding them. The polypeptides and polynucleotides are used for treating
diseases related to growth or survival of nerve cells such as Parkinson's
disease, Alzheimer's disease, amyotrophic lateral sclerosis (ALS) and
neuropathies, diseases related to uncontrolled cell growth such as
cancer, viral infections, Usher's syndrome, haemorrhage, enterocolitis,
Zollinger-Ellison syndrome, gastrointestinal ulceration, congenital
microvillus atrophy, skin diseases such as psoriasis and epithelial
cancers, endometrial bleeding, angiogenesis, ischaemic conditions,
asthma, rheumatoid arthritis, multiple sclerosis, inflammatory diseases,
atherosclerosis, cardiac injury, infertility, birth defects, premature

CC aging, AIDS, stroke and diabetic complications. The polynucleotides are
CC also useful in chromosome and gene mapping. This sequence represents a
CC PCR primer used in isolation of a human PRO polynucleotide of the
CC invention
XX
SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1101 GCTGTCTCAGGGGAG 1116
Db 3 GCTGTCTCAGGGGAG 18
RESULT 1907
ADA16689
ID ADA16689 standard; DNA; 18 BP.
XX
AC ADA16689;
XX
DT 06-NOV-2003 (first entry)
XX
DE Human secreted/transmembrane protein, #44, PCR primer #2.
XX
KW Human; PCR; primer; ss; PRO; secreted; transmembrane;
KW gastrointestinal mucosa; mucosal lesion; skin disease;
KW keratinocyte differentiation; psoriasis; Parkinson's disease;
KW Alzheimer's diseases; amyotrophic lateral sclerosis; ALS; neuropathy;
KW cell growth; cancer; tumour; viral infection; neurodegenerative disease;
KW antithrombotic agent; haemorrhage; endometrial bleeding angiogenesis;
KW kidney tissue; apoptosis; therapeutic; tissue typing;
KW immunohistochemical staining; gene therapy; neuroprotective;
KW cytostatic; virucide; anticoagulant.
XX
OS Homo sapiens.
XX
PN US2003039969-A1.
XX
PD 27-FEB-2003.
XX
PF 12-JUL-2001; 2001US-00904786.
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0063814P.
PR 24-OCT-1997; 97US-0063816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063272P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.

KW Human, PCR; primer; ss; PRO; secreted; transmembrane;
 KW gastrointestinal mucosa; mucosal lesion; skin disease;
 KW keratinocyte differentiation; psoriasis; Parkinson's disease;
 KW Alzheimer's diseases; amyotrophic lateral sclerosis; ALS; neuropathy;
 KW cell growth; cancer; tumour; viral infection; neurodegenerative disease;
 KW antithrombotic agent; haemorrhage; endometrial bleeding angiogenesis;
 KW kidney tissue; apoptosis; therapeutic; tissue typing;
 KW immunohistochemical staining; gene therapy; nootropic; neuroprotective;
 KW cytostatic; virucide; anticoagulant.
 XX
 OS Homo sapiens.
 XX
 PN US2003049622-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 14-JUL-2001; 2001US-00904956.
 XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0063486P.
 PR 21-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 14-SEP-1998; 98US-0100262P.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.
 XX
 XX (GETH) GENENTECH INC.
 XX
 PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AJ, Hillan KJ, Kljavin LJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PN, Wood WI;
 XX WPI; 2003-521802/49.
 XX
 PT New secreted and transmembrane PRO polypeptides, useful for treating the
 PT cancer, skin disorders, neurodegenerative diseases, and for lessening the
 PT effects of viral infection.
 PT
 PS Example 36; SEQ ID NO 229; 473pp; English.
 XX
 CC The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. PRO polypeptides are also useful
 CC for treating disorders associated with the preservation and maintenance
 CC of gastrointestinal mucosa and the repair of acute and chronic mucosal
 CC lesions, skin diseases associated with abnormal keratinocyte
 CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
 CC diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
 CC additionally, disease related to uncontrolled cell growth, e.g. cancer.
 CC PRO polypeptides also serves as tumour specific antigens which may be
 CC exploited as therapeutic targets for anti-tumour drugs, and are also
 CC employed therapeutically in vivo for lessening the effects of viral
 CC infection. The PRO polypeptides can be also used in assays to determine
 CC if it has a role in neurodegenerative diseases or their reversal, as an

CC antithrombotic agent with reduced risk for haemorrhage as compared with
 CC heparin, in treating other PRO-associated disorders, in modulating
 CC endometrial bleeding angiogenesis, and may also have an effect on kidney
 CC tissue. PRO polypeptides and their portions affect the expression of
 CC genes which have a role in apoptosis. The polynucleotides are useful in
 CC molecular biology including uses as hybridisation probes for cDNA library
 CC to isolate the full-length PRO cDNA or to isolate other cDNAs, in
 CC chromosome and gene mapping, in the generation of antisense RNA and DNA,
 CC for preparing PRO polypeptides, for generating transgenic animals or
 CC knockout animals which are useful in the development and screening of
 CC therapeutically useful reagents, as probes and for the genetic analysis
 CC of individuals with genetic disorders as well as for recombinantly
 CC expressing the protein and for chromosome identification. The proteins
 CC are useful as molecular marker for protein electrophoresis purposes, as
 CC therapeutic agents, for screening compounds to identify those that mimic
 CC the PRO polypeptide (agonists) or prevent the effect of the PRO
 CC polypeptide (antagonists). The polynucleotides and proteins are useful
 CC for tissue typing. PRO antibodies are useful for immunohistochemical
 CC staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
 CC diagnostic assays for PRO e.g. detecting its expression in specific
 CC cells, tissues or serum and for affinity purification of PRO from
 CC recombinant cell culture or natural sources. The PRO genes may also be
 CC used in gene therapy, particularly for replacing a defective gene. The
 CC polynucleotide presented is a PCR primer which was used to amplify a PRO
 CC polynucleotide of the invention.

SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGCTCTCAGGGGAG 1116
 Db 3 GCTGCTCAGGGGAG 18

RESULT 1909

ADA41986
 ID ADA41986 standard; DNA; 18 BP.

XX ADA41986;

DT 20-NOV-2003 (first entry)

XX Human secreted/transmembrane protein, #44, PCR primer #2.

XX Human; PCR; primer; ss; PRO; secreted; transmembrane;
 KW gastrointestinal mucosa; mucosal lesion; skin disease;
 KW keratinocyte differentiation; psoriasis; parkinson's disease;
 KW Alzheimer's diseases; amyotrophic lateral sclerosis; ALS; neuropathy;
 KW cell growth; cancer; tumour; viral infection; neurodegenerative disease;
 KW antithrombotic agent; haemorrhage; endometrial bleeding angiogenesis;
 KW kidney tissue; apoptosis; therapeutic; tissue typing;
 KW immunohistochemical staining; gene therapy; neurotropic; neuroprotective;
 KW cytotostatic; virucide; anticoagulant.

XX Homo sapiens.

XX US2003082540-A1.

XX 01-MAY-2003.

XX 10-JUL-2001; 2001US-00902634.

XX 17-SEP-1997; 97US-0059113P.

XX 17-SEP-1997; 97US-0059115P.

XX 17-SEP-1997; 97US-0059117P.

XX 17-SEP-1997; 97US-0059119P.

XX 17-SEP-1997; 97US-0059121P.

XX 17-SEP-1997; 97US-0059122P.

XX 17-SEP-1997; 97US-0059184P.

XX 18-SEP-1997; 97US-0059263P.

PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0098033P.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 01-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.

22-FEB-2000; 2000WO-US004414.
 24-FEB-2000; 2000WO-US005004.
 02-MAR-2000; 2000WO-US005841.
 30-MAR-2000; 2000WO-US007377.
 30-MAR-2000; 2000WO-US008439.
 22-MAY-2000; 2000WO-US011042.
 02-JUN-2000; 2000WO-US015264.
 28-JUL-2000; 2000WO-US020710.
 24-AUG-2000; 2000WO-US023328.
 18-SEP-2000; 2000US-00665350.
 (GETH) GENENTECH INC.
 Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin LJ;
 Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 Williams PM, Wood WI;
 WPI; 2003-755103/71.
 New PRO polypeptides useful for treating Parkinson's disease,
 enterocolitis, Zollinger-Ellison syndrome gastrointestinal ulceration,
 Alzheimer's disease, amyotrophic lateral sclerosis and Usher syndrome.
 Example 36; SEQ ID NO 229; 468bp; English.
 The invention discloses isolated PRO secreted/transmembrane polypeptides
 and the nucleic acid encoding them. The polypeptides can be used to raise
 antibodies that specifically bind to the PRO polypeptide, for linking a
 bioactive molecule to a cell expressing a PRO protein and for modulating
 at least one biological activity of a cell. PRO polypeptides are useful
 for detecting other PRO polypeptides in a sample and for linking a
 bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 polypeptide antibodies are useful for modulating the biological activity
 of a cell expressing PRO polypeptides. PRO polypeptides are also useful
 for treating disorders associated with the preservation and maintenance
 of gastrointestinal mucosa and the repair of acute and chronic mucosal
 lesions, skin diseases associated with abnormal keratinocyte
 differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
 diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
 additionally, disease related to uncontrolled cell growth, e.g. cancer.
 PRO polypeptides also serve as tumour specific antigens which may be
 exploited as therapeutic targets for anti-tumour drugs, and are also
 employed therapeutically in vivo for lessening the effects of viral
 infection. The PRO polypeptides can be also used in assays to determine
 if it has a role in neurodegenerative diseases or their reversal, as an
 antithrombotic agent with reduced risk for haemorrhage as compared with
 heparin, in treating other PRO-associated disorders, in modulating
 endometrial bleeding angiogenesis, and may also have an effect on kidney
 tissue. PRO polypeptides and their portions affect the expression of
 genes which have a role in apoptosis. The polynucleotides are useful in
 molecular biology including uses as hybridisation probes for cDNA library
 to isolate the full-length PRO cDNA or to isolate other cDNAs, in
 chromosome and gene mapping, in the generation of antisense RNA and DNA,
 for preparing PRO polypeptides, for generating transgenic animals or
 knockout animals which are useful in the development and screening of
 therapeutically useful reagents, as probes and for the genetic analysis
 of individuals with genetic disorders as well as for recombinantly
 expressing the protein and for chromosome identification. The proteins
 are useful as molecular marker for protein electrophoresis purposes, as
 therapeutic agents, for screening compounds to identify those that mimic
 the PRO polypeptide (agonists) or prevent the effect of the PRO
 polypeptide (antagonists). The polynucleotides and proteins are useful
 for tissue typing. PRO antibodies are useful for immunohistochemical
 staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
 diagnostic assays for PRO e.g. detecting its expression in specific
 cells, tissues or serum and for affinity purification of PRO from
 recombinant cell culture or natural sources. The PRO genes may also be
 used in gene therapy, particularly for replacing a defective gene. The
 sequence presented is a PCR primer which was used to amplify a PRO
 polynucleotide of the invention.

SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. NO. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCTCTCAGGGGAG 1116
 DB 3 GCTGTCTCAGGGGAG 18
 RESULT 1910
 ADA17333
 ID ADA17333 standard; DNA; 18 BP.
 XX
 AC ADA17333;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Human secreted/transmembrane protein, #44, PCR primer #2.
 XX
 KW Human; PCR; primer; ss; PRO; secreted; transmembrane;
 KW gastrointestinal mucosa; mucosal lesion; skin disease;
 KW keratinocyte differentiation; psoriasis; Parkinson's disease;
 KW Alzheimer's diseases; amyotrophic lateral sclerosis; ALS; neuropathy;
 KW cell growth; cancer; tumour; viral infection; neurodegenerative disease;
 KW antithrombotic agent; haemorrhage; endometrial bleeding angiogenesis;
 KW kidney tissue; apoptosis; therapeutic; tissue typing;
 KW immunohistochemical staining; gene therapy; neuroprotective;
 KW cytoskeletal; virucide; anticoagulant.
 XX
 OS Homo sapiens.
 XX
 PN US2003017498-A1.
 XX
 PD 23-JAN-2003.
 XX
 PF 17-JUL-2001; 2001US-00908093.
 XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.

29-OCT-1997; 97US-00642115P.
 31-OCT-1997; 97US-0063870P.
 31-OCT-1997; 97US-0064103P.
 03-NOV-1997; 97US-0064248P.
 07-NOV-1997; 97US-0064809P.
 12-NOV-1997; 97US-0065186P.
 17-NOV-1997; 97US-0065846P.
 18-NOV-1997; 97US-0065693P.
 21-NOV-1997; 97US-0066120P.
 21-NOV-1997; 97US-0066364P.
 24-NOV-1997; 97US-0066453P.
 24-NOV-1997; 97US-0066466P.
 24-NOV-1997; 97US-0066511P.
 24-NOV-1997; 97US-0066770P.
 24-NOV-1997; 97US-0066772P.
 24-NOV-1997; 97US-0066840P.
 12-DEC-1997; 97US-0069425P.
 04-JUN-1998; 98US-0088026P.
 10-SEP-1998; 98US-0099803P.
 14-SEP-1998; 98US-0100262P.
 14-SEP-1998; 98US-0100282P.
 16-SEP-1998; 98US-0100294P.
 17-SEP-1998; 98US-0100330P.
 17-SEP-1998; 98US-0100858P.
 17-SEP-1998; 98US-0101943P.
 13-OCT-1998; 98US-0104080P.
 20-NOV-1998; 98US-0109304P.
 01-DEC-1998; 98US-0109251P.
 22-DEC-1998; 98US-0113296P.
 07-JUL-1999; 99US-0114304P.
 28-JUL-1999; 99US-0145698P.
 28-JUL-1999; 99US-0146222P.
 08-SEP-1999; 99US-0205094P.
 13-SEP-1999; 99US-0202094P.
 15-SEP-1999; 99US-0202109P.
 15-SEP-1999; 99US-0202154P.
 15-SEP-1999; 99US-0202308P.
 23-NOV-1999; 99US-0202821P.
 30-NOV-1999; 99US-0202831P.
 01-DEC-1999; 99US-0202830P.
 02-DEC-1999; 99US-0202856P.
 02-DEC-1999; 99US-0202856P.
 16-DEC-1999; 99US-0203091P.
 20-DEC-1999; 99US-0203091P.
 05-JAN-2000; 2000US-0200219P.
 11-FEB-2000; 2000US-0203565P.
 22-FEB-2000; 2000US-0204414P.
 24-FEB-2000; 2000US-0205004P.
 02-MAR-2000; 2000US-0205841P.
 20-MAR-2000; 2000US-0207377P.
 30-MAR-2000; 2000US-0208439P.
 22-MAY-2000; 2000US-021042P.
 02-JUN-2000; 2000US-0215264P.
 28-JUL-2000; 2000US-0202071P.
 24-AUG-2000; 2000US-0203328P.
 18-SEP-2000; 2000US-02065350P.

(GETH) GENENTECH INC.

PA Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2003-531434/50.

XX New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO245 or
 PT PRO1868, useful in molecular biology, chromosome and gene mapping, in
 PT generating antisense RNA and DNA, and in gene therapy.
 XX Example 36; SEQ ID NO 229; 475pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. PRO polypeptides are also useful
 CC for treating disorders associated with the preservation and maintenance
 CC of gastrointestinal mucosa and the repair of acute and chronic mucosal
 CC lesions, skin diseases associated with abnormal keratinocyte
 CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
 CC diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
 CC additionally, disease related to uncontrolled cell growth, e.g. cancer.
 CC PRO polypeptides also serve as tumour specific antigens which may be
 CC exploited as therapeutic targets for anti-tumour drugs, and are also
 CC employed therapeutically in vivo for lessening the effects of viral
 CC infection. The PRO polypeptides can be also used in assays to determine
 CC if it has a role in neurodegenerative diseases or their reversal, as an
 CC antithrombotic agent with reduced risk for haemorrhage as compared with
 CC heparin, in treating other PRO-associated disorders, in modulating
 CC endometrial bleeding angiogenesis, and may also have an effect on kidney
 CC tissue. PRO polypeptides and their portions affect the expression of
 CC genes which have a role in apoptosis. The polynucleotides are useful in
 CC molecular biology including uses as hybridisation probes for cDNA library
 CC to isolate the full-length PRO cDNA or to isolate other cDNAs, in
 CC chromosome and gene mapping, in the generation of antisense RNA and DNA,
 CC for preparing PRO polypeptides, for generating transgenic animals or
 CC knockout animals which are useful in the development and screening of
 CC therapeutically useful reagents, as probes and for the genetic analysis
 CC of individuals with genetic disorders as well as for recombinantly
 CC expressing the protein and for chromosome identification. The proteins
 CC are useful as molecular marker for protein electrophoresis purposes, as
 CC therapeutic agents, for screening compounds to identify those that mimic
 CC the PRO polypeptide (agonists) or prevent the effect of the PRO
 CC polypeptide (antagonists). The polynucleotides and proteins are useful
 CC for tissue typing. PRO antibodies are useful for immunohistochemical
 CC staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
 CC diagnostic assays for PRO e.g. detecting its expression in specific
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 CC recombinant cell culture or natural sources. The PRO genes may also be
 CC used in gene therapy, particularly for replacing a defective gene. The
 CC sequence presented is a PCR primer which was used to amplify a PRO
 CC polynucleotide of the invention.

XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCTTCAGGGGAG 1116
 ||||| |||||
 Db 3 GCTGTCCACAGGGGAG 18

RESULT 1911
 ADA42836
 ID ADA42836 standard; DNA; 18 BP.
 XX
 AC ADA42836;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Human secreted/transmembrane protein, #44, PCR primer #2.
 XX
 KW Human; PCR; primer; ss; PRO; secreted; transmembrane;
 KW gastrointestinal mucosa; mucosal lesion; skin disease;
 KW keratinocyte differentiation; psoriasis; Parkinson's disease;
 KW Alzheimer's diseases; amyotrophic lateral sclerosis; ALS; neuropathy;
 KW cell growth; cancer; tumour; viral infection; neurodegenerative disease;

antithrombotic agent; haemorrhage; endometrial bleeding angiogenesis;
kidney tissue; apoptosis; therapeutic; tissue typing;
immunohistochemical staining; gene therapy; neuroprotective;
cytostatic; virucide; anticoagulant.

OS Homo sapiens.
XX US2003054351-A1.
XX 20-MAR-2003.
XX 13-JUL-2001; 2001US-00904462.
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063341P.
PR 28-OCT-1997; 97US-0063342P.
PR 28-OCT-1997; 97US-0063344P.
PR 28-OCT-1997; 97US-0063349P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98US-0099803P.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98US-0100262P.
PR 16-SEP-1998; 98US-0100262P.
PR 16-SEP-1998; 98US-0100262P.
PR 17-SEP-1998; 98US-0100262P.
PR 17-SEP-1998; 98US-0100262P.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98US-0109304P.
PR 01-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 26-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99US-0146222P.
PR 13-SEP-1999; 99US-0146222P.
PR 15-SEP-1999; 99US-0146222P.
PR 15-SEP-1999; 99US-0146222P.
PR 05-OCT-1999; 99US-0146222P.
PR 29-NOV-1999; 99US-0146222P.
PR 30-NOV-1999; 99US-0146222P.
PR 01-DEC-1999; 99US-0146222P.
PR 02-DEC-1999; 99US-0146222P.
PR 16-DEC-1999; 99US-0146222P.
PR 20-DEC-1999; 99US-0146222P.
PR 20-DEC-1999; 99US-0146222P.
PR 05-JAN-2000; 2000US-0000219.
PR 11-FEB-2000; 2000US-0000219.
PR 22-FEB-2000; 2000US-0000219.
PR 24-FEB-2000; 2000US-0000219.
PR 02-MAR-2000; 2000US-0000219.
PR 20-MAR-2000; 2000US-0000219.
PR 30-MAR-2000; 2000US-0000219.
PR 22-MAY-2000; 2000US-0000219.
PR 02-JUN-2000; 2000US-0000219.
PR 28-JUL-2000; 2000US-0000219.
PR 24-AUG-2000; 2000US-0000219.
PR 18-SEP-2000; 2000US-0000219.
XX (GETH) GENENTECH INC.
XX Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kijavini TJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX WPI; 2003-755052/71.
XX Novel isolated secreted and transmembrane PRO polypeptide, useful for
PT tissue typing, treating Parkinson's disease, Alzheimer's disease, birth
PT defects, cancer.
XX Example 36; SEQ ID NO 229; 464pp; English.
XX The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. PRO polypeptides are also useful
CC for treating disorders associated with the preservation and maintenance
CC of gastrointestinal mucosa and the repair of acute and chronic mucosal
CC lesions, skin diseases associated with abnormal keratinocyte
CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
CC diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
CC additionally, disease related to uncontrolled cell growth, e.g. cancer.
CC PRO polypeptides also serve as tumour specific antigens which may be
CC exploited as therapeutic targets for anti-tumour drugs, and are also
CC employed therapeutically in vivo for lessening the effects of viral
CC infection. The PRO polypeptides can be also used in assays to determine
CC if it has a role in neurodegenerative diseases or their reversal, as an
CC antithrombotic agent with reduced risk for haemorrhage as compared with
CC heparin, in treating other PRO-associated disorders, in modulating
CC endometrial bleeding angiogenesis, and may also have an effect on kidney
CC tissue. PRO polypeptides and their portions affect the expression of
CC genes which have a role in apoptosis. The polynucleotides are useful in

CC molecular biology including uses as hybridisation probes for cDNA library
 CC to isolate the full-length PRO cDNA or to isolate other cDNAs in
 CC chromosome and gene mapping, in the generation of antisense RNA and DNA,
 CC for preparing PRO polypeptides, for generating transgenic animals or
 CC knockout animals which are useful in the development and screening of
 CC therapeutically useful reagents, as probes and for the genetic analysis
 CC of individuals with genetic disorders as well as for recombinantly
 CC expressing the protein and for chromosome identification. The proteins
 CC are useful as molecular marker for protein electrophoresis purposes, as
 CC therapeutic agents, for screening compounds to identify those that mimic
 CC the PRO polypeptide (agonists) or prevent the effect of the PRO
 CC polypeptide (antagonists). The polynucleotides and proteins are useful
 CC for tissue typing. PRO antibodies are useful for immunohistochemical
 CC staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
 CC diagnostic assays for PRO e.g. detecting its expression in specific
 CC cells, tissues or serum and for affinity purification of PRO from
 CC recombinant cell culture or natural sources. The PRO genes may also be
 CC used in gene therapy, particularly for replacing a defective gene. The
 CC sequence presented is a PCR primer which was used to amplify a PRO
 CC polynucleotide of the invention.

SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1101 GCTGCTCTCAGGGGAG 1116
 Db 3 GCTGCTCAGGGGAG 18
 |||||

RESULT 1912

ACD23679

ID ACD23679 standard; DNA; 18 BP.

XX AC ACD23679;

DT 26-AUG-2003 (first entry)

XX DE Human PRO PCR primer #96.

XX Human; PRO; primer; ss; secreted polypeptide; transmembrane polypeptide;
 KW leukocyte homing; rheumatoid arthritis; psoriasis; multiple sclerosis;
 KW mucosal lesion; enterocolitis Zollinger Ellison syndrome; asthma; PCR;
 KW antiasthmatic; antirheumatic; antiarthritic; neuroprotective.

XX OS Homo sapiens.

XX US2003064923-A1.

XX PD 03-APR-2003.

PF 13-JUL-2001; 2001US-00905348.

XX 17-SEP-1997; 97US-0059113P.

PR 17-SEP-1997; 97US-0059111P.

PR 17-SEP-1997; 97US-0059117P.

PR 17-SEP-1997; 97US-0059119P.

PR 17-SEP-1997; 97US-0059121P.

PR 17-SEP-1997; 97US-0059122P.

PR 17-SEP-1997; 97US-0059184P.

PR 18-SEP-1997; 97US-0059263P.

PR 18-SEP-1997; 97US-0059266P.

PR 15-OCT-1997; 97US-0062125P.

PR 17-OCT-1997; 97US-0062285P.

PR 17-OCT-1997; 97US-0062287P.

PR 21-OCT-1997; 97US-00623486P.

PR 24-OCT-1997; 97US-0062814P.

PR 24-OCT-1997; 97US-0062816P.

PR 24-OCT-1997; 97US-0063045P.

PR 24-OCT-1997; 97US-0063120P.

PR 24-OCT-1997; 97US-0063121P.

PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063227P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066468P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088028P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 98US-0143048P.
 PR 26-JUL-1999; 98US-0145698P.
 PR 28-JUL-1999; 98US-0146222P.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.

29-NOV-1999; 99WO-US028214.
 30-NOV-1999; 99WO-US028313.
 01-DEC-1999; 99WO-US028301.
 02-DEC-1999; 99WO-US028564.
 02-DEC-1999; 99WO-US028565.
 16-DEC-1999; 99WO-US030095.
 20-DEC-1999; 99WO-US030911.
 20-DEC-1999; 99WO-US030999.
 05-JAN-2000; 2000WO-US000219.
 11-FEB-2000; 2000WO-US003565.
 22-FEB-2000; 2000WO-US004414.
 04-MAR-2000; 2000WO-US005004.
 24-MAR-2000; 2000WO-US005841.
 30-MAR-2000; 2000WO-US007377.
 30-MAR-2000; 2000WO-US008439.
 22-MAY-2000; 2000WO-US014042.
 02-JUN-2000; 2000WO-US015264.
 28-JUL-2000; 2000WO-US020710.
 24-AUG-2000; 2000WO-US023328.
 18-SEP-2000; 2000US-00665350.
 (GETH) GENENTECH INC.
 Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin LJ;
 Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 Williams PM, Wood WI;
 WPI; 2003-765399/72.
 New isolated secreted and transmembrane polypeptide, useful for treating diseases, e.g. Parkinson's disease, Alzheimer's disease, amyotrophic lateral sclerosis, cancer, neuropathies, diabetes and psoriasis.
 Example 36; Page 98; 467pp; English.
 The invention discloses isolated PRO secreted/transmembrane polypeptides and the nucleic acid encoding them. The polypeptides can be used to raise antibodies that specifically bind to the PRO polypeptide, for linking a bioactive molecule to a cell expressing a PRO protein and for modulating at least one biological activity of a cell. PRO polypeptides are useful for detecting other PRO polypeptides in a sample and for linking a bioactive molecule to a cell expressing a PRO polypeptide. The PRO polypeptide antibodies are useful for modulating the biological activity of a cell expressing PRO polypeptides. PRO polypeptides are also useful for treating disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions, skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's diseases, amyotrophic lateral sclerosis (ALS), neuropathies and additionally, disease related to uncontrolled cell growth, e.g. cancer. PRO polypeptides also serve as tumour specific antigens which may be exploited as therapeutic targets for anti-tumour drugs, and are also employed therapeutically in vivo for lessening the effects of viral infection. The PRO polypeptides can be also used in assays to determine if it has a role in neurodegenerative diseases or their reversal, as an antithrombotic agent with reduced risk for haemorrhage as compared with heparin, in treating other PRO-associated disorders, in modulating endothelial bleeding angiogenesis, and may also have an effect on kidney tissue. PRO polypeptides and their portions affect the expression of genes which have a role in apoptosis. The polynucleotides are useful in molecular biology including uses as hybridisation probes for cDNA library to isolate the full-length PRO cDNA or to isolate other cDNAs, in chromosome and gene mapping, in the generation of antisense RNA and DNA, for preparing PRO polypeptides, for generating transgenic animals or knockout animals which are useful in the development and screening of therapeutically useful reagents, as probes and for the genetic analysis of individuals with genetic disorders as well as for recombinantly expressing the protein and for chromosome identification. The proteins are useful as molecular marker for protein electrophoresis purposes, as therapeutic agents, for screening compounds to identify those that mimic the PRO polypeptide (agonists) or prevent the effect of the PRO

CC polypeptide (antagonists). The polynucleotides and proteins are useful for tissue typing. PRO antibodies are useful for immunohistochemical staining and/or assay of sample fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The sequence presented is a PCR primer which was used to amplify a PRO polynucleotide of the invention.
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCCTCAGGGGAG 1116
 Db 3 GCTGTCCACAGGGGAG 18
 RESULT 1914
 ADB74891
 ID ADB74891 standard; DNA; 18 BP.
 XX
 AC ADB74891;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Human secreted/transmembrane protein, #44, PCR primer #2.
 XX
 KW Human; PCR; primer; ss; PRO; secreted; transmembrane;
 KW gastrointestinal mucosa; mucosal lesion; skin disease;
 KW keratinocyte differentiation; psoriasis; Parkinson's disease;
 KW Alzheimer's diseases; amyotrophic lateral sclerosis; ALS; neuropathy;
 KW cell growth; cancer; tumour; viral infection; neurodegenerative disease;
 KW antithrombotic agent; haemorrhage; endometrial bleeding angiogenesis;
 KW kidney tissue; apoptosis; therapeutic; tissue typing;
 KW immunohistochemical staining; gene therapy; nontropic; neuroprotective;
 KW cytoskeletal; virucide; anticoagulant.
 XX
 OS Homo sapiens.
 XX
 PN US2003082542-A1.
 XX
 PD 01-MAY-2003.
 XX
 PF 17-JUL-2001; 2001US-00907979.
 XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059268P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.

AC ADC28537;
 XX 18-DEC-2003 (first entry)
 XX Human secreted/transmembrane protein, #44, PCR primer #2.
 XX Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypotension; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiac; vulnary; cytoskeletal; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.
 XX Homo sapiens.
 OS
 XX US2003059772-A1.
 XX 27-MAR-2003.
 XX 18-JUL-2001; 2001US-00909064.
 XX 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0062486P.
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 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063341P.
 PR 28-OCT-1997; 97US-0063342P.
 PR 28-OCT-1997; 97US-0063344P.
 PR 28-OCT-1997; 97US-0063349P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 18-NOV-1997; 97US-0065946P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.

PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 05-JAN-2000; 99WO-US030999.
 PR 11-FEB-2000; 2000WO-US000219.
 PR 22-FEB-2000; 2000WO-US003565.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 30-MAR-2000; 2000WO-US007377.
 PR 22-MAY-2000; 2000WO-US008439.
 PR 28-JUL-2000; 2000WO-US014042.
 PR 28-JUL-2000; 2000WO-US015264.
 PR 24-AUG-2000; 2000WO-US020710.
 PR 18-SEP-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.

(GETH) GENENTECH INC.

PA Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2003-540670/51.

XX Novel secreted and transmembrane polypeptides and polynucleotides
 PT encoding them useful for treating skin, neurodegenerative diseases, as an
 PT antithrombotic agent and for inducing endothelial cell apoptosis.

XX Example 36; SEQ ID NO 229; 470pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of

stimulated T-lymphocytes, enhancing the survival or proliferation of
retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
cells, modulating glucose or FFA uptake, inducing proliferation and/or re-
differentiation of chondrocytes. In particular, these are useful for
detecting or treating cardiac insufficiency disorders, wounds, cancerous
tumours, retinal disorders or injuries (e.g. loss of sight due to
retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
arthritis) in mammals. PRO polypeptides and their portions affect the
expression of genes which have a role in cell death. The polynucleotides
are useful in molecular biology including uses as hybridisation probes
for cDNA library to isolate the full-length PRO cDNA or to isolate other
cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
and DNA, for preparing PRO polypeptides, for generating transgenic
animals or knockout animals which are useful in the development and
screening of therapeutically useful reagents, as probes and for the
genetic analysis of individuals with genetic disorders as well as for
recombinantly expressing the protein and for chromosome identification.
The proteins are useful as molecular marker for protein electrophoresis
purposes, as therapeutic agents, for screening compounds to identify
those that mimic the PRO polypeptide (agonists) or prevent the effect of
the PRO polypeptide (antagonists). The polynucleotides and proteins are
useful for tissue typing. PRO antibodies are useful for
immunohistochemical staining and/or assay of sample fluids. Anti-PRO
antibodies are useful in diagnostic assays for PRO e.g. detecting its
expression in specific cells, tissues or serum and for affinity
purification of PRO from recombinant cell culture or natural sources. The
PRO genes may also be used in gene therapy, particularly for replacing a
defective gene. The sequence presented is a PCR primer which was used to
amplify a PRO polynucleotide of the invention.

Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCCTCAGGGGAG 1116
|||||
Db 3 GCTGTCCACAGGGGAG 18

RESULT 1916

ADC39737

ID ADC39737 standard; DNA; 18 BP.

XX ADC39737;

AC ADC39737;

XX 18-DEC-2003 (first entry)

XX Human secreted/transmembrane protein, #44, PCR primer #2.

Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
tissue typing; immunohistochemical staining; gene therapy;
neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
endothelial cell; stimulated T-lymphocyte; retinal neuron;
rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia; injury;
hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
arthritis; cardiac; vulnery; cytotatic; ophthalmological;
osteopathic; antiarthritic; anorectic.

OS Homo sapiens.

XX US2003059828-A1.

PN 27-MAR-2003.

XX 13-JUL-2001; 2001US-00904553.

XX 17-SEP-1997; 97US-0059113P.

PR 17-SEP-1997; 97US-0059113P.

PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063545P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 31-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98US-0100263P.
PR 16-SEP-1998; 98US-0100330P.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98US-0100859P.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 20-DEC-1998; 98US-0109304P.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99US-0146222P.
PR 13-SEP-1999; 99US-020594.
PR 15-SEP-1999; 99US-020594.
PR 15-SEP-1999; 99US-020594.
PR 05-OCT-1999; 99US-020594.
PR 29-NOV-1999; 99US-020594.
PR 30-NOV-1999; 99US-020594.
PR 01-DEC-1999; 99US-020594.
PR 02-DEC-1999; 99US-020594.

PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US000365.
 PR 22-FEB-2000; 2000WO-US000414.
 PR 24-FEB-2000; 2000WO-US000504.
 PR 02-MAR-2000; 2000WO-US000584.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.

XX (GETH) GENENTECH INC.

PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Klijavin LJ;
 PI Mather JP, Pan J, Paoi NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;

XX WPI; 2003-540675/51.

DR Novel secreted and transmembrane polypeptides and polynucleotides
 PT encoding them useful for treating skin, neurodegenerative diseases, as an
 PT antithrombotic agent and for inducing endothelial cell apoptosis.

XX Example 36; SEQ ID NO 229; 477bp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re-
 CC -differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The

CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCTCTCAGGGGAG 1116
 |||||
 Db 3 GCTGTCCACAGGGGAG 18

RESULT 1917

ID ADC40251 standard; DNA; 18 BP.

XX AC ADC40251;

XX DT 18-DEC-2003 (first entry)

XX DE Human secreted/transmembrane protein, #44, PCR primer #2.

XX Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiant; vulnary; cytostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.

XX Homo sapiens.

XX US2003059829-A1.

XX 27-MAR-2003.

XX 13-JUL-2001; 2001US-00905381.

XX 17-SEP-1997; 97US-0059113P.

XX 17-SEP-1997; 97US-0059115P.

XX 17-SEP-1997; 97US-0059117P.

XX 17-SEP-1997; 97US-0059119P.

XX 17-SEP-1997; 97US-0059121P.

XX 17-SEP-1997; 97US-0059122P.

XX 18-SEP-1997; 97US-0059184P.

XX 18-SEP-1997; 97US-0059263P.

XX 15-OCT-1997; 97US-0062266P.

XX 17-OCT-1997; 97US-0062125P.

XX 17-OCT-1997; 97US-0062285P.

XX 21-OCT-1997; 97US-0062287P.

XX 24-OCT-1997; 97US-0063486P.

XX 24-OCT-1997; 97US-0062814P.

XX 24-OCT-1997; 97US-0062816P.

XX 24-OCT-1997; 97US-0063045P.

XX 24-OCT-1997; 97US-0063120P.

XX 24-OCT-1997; 97US-0063121P.

XX 24-OCT-1997; 97US-0063127P.

XX 27-OCT-1997; 97US-0063128P.

XX 27-OCT-1997; 97US-0063327P.

XX 28-OCT-1997; 97US-0063329P.

XX 28-OCT-1997; 97US-0063541P.

XX 28-OCT-1997; 97US-0063542P.

XX 28-OCT-1997; 97US-0063544P.

XX 28-OCT-1997; 97US-0063549P.

XX 28-OCT-1997; 97US-0063550P.

XX 28-OCT-1997; 97US-0063564P.

XX 29-OCT-1997; 97US-0063435P.

KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; PFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypotension; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiac; vulvular; cytostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.

OS Homo sapiens.

XX US2003036061-A1.

PN 20-FEB-2003.

PD 18-JUL-2001; 2001US-00909204.

XX 17-SEP-1997; 97US-0059113P.

PR 17-SEP-1997; 97US-0059115P.

PR 17-SEP-1997; 97US-0059117P.

PR 17-SEP-1997; 97US-0059119P.

PR 17-SEP-1997; 97US-0059121P.

PR 17-SEP-1997; 97US-0059122P.

PR 17-SEP-1997; 97US-0059184P.

PR 18-SEP-1997; 97US-0059263P.

PR 18-SEP-1997; 97US-0059266P.

PR 15-OCT-1997; 97US-0062125P.

PR 17-OCT-1997; 97US-0062285P.

PR 17-OCT-1997; 97US-0062287P.

PR 21-OCT-1997; 97US-0063486P.

PR 24-OCT-1997; 97US-0062814P.

PR 24-OCT-1997; 97US-0062816P.

PR 24-OCT-1997; 97US-0063045P.

PR 24-OCT-1997; 97US-0063120P.

PR 24-OCT-1997; 97US-0063121P.

PR 24-OCT-1997; 97US-0063127P.

PR 24-OCT-1997; 97US-0063128P.

PR 27-OCT-1997; 97US-0063327P.

PR 27-OCT-1997; 97US-0063329P.

PR 28-OCT-1997; 97US-0063541P.

PR 28-OCT-1997; 97US-0063542P.

PR 28-OCT-1997; 97US-0063544P.

PR 28-OCT-1997; 97US-0063549P.

PR 28-OCT-1997; 97US-0063550P.

PR 28-OCT-1997; 97US-0063564P.

PR 29-OCT-1997; 97US-0063435P.

PR 29-OCT-1997; 97US-0063704P.

PR 29-OCT-1997; 97US-0063732P.

PR 29-OCT-1997; 97US-0063734P.

PR 29-OCT-1997; 97US-0063735P.

PR 29-OCT-1997; 97US-0063738P.

PR 29-OCT-1997; 97US-0064215P.

PR 31-OCT-1997; 97US-0063870P.

PR 31-OCT-1997; 97US-0064103P.

PR 03-NOV-1997; 97US-0064248P.

PR 07-NOV-1997; 97US-0064809P.

PR 12-NOV-1997; 97US-0065186P.

PR 17-NOV-1997; 97US-0065846P.

PR 18-NOV-1997; 97US-0065893P.

PR 21-NOV-1997; 97US-0066120P.

PR 21-NOV-1997; 97US-0066364P.

PR 24-NOV-1997; 97US-0066466P.

PR 24-NOV-1997; 97US-0066511P.

PR 24-NOV-1997; 97US-0066770P.

PR 24-NOV-1997; 97US-0066772P.

PR 25-NOV-1997; 97US-0066840P.

PR 12-DEC-1997; 97US-0069425P.

PR 04-JUN-1998; 98US-0088026P.

PR 10-SEP-1998; 98US-0099803P.

PR 10-SEP-1998; 98WO-US01882A.

PR 14-SEP-1998; 98US-0100262P.

PR 14-SEP-1998; 98WO-US019177.

PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0148222P.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 16-DEC-1999; 99WO-US028565.
 PR 20-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 05-JAN-2000; 99WO-US030999.
 PR 11-FEB-2000; 2000WO-US000219.
 PR 22-FEB-2000; 2000WO-US003565.
 PR 24-FEB-2000; 2000WO-US004414.
 PR 02-MAR-2000; 2000WO-US005004.
 PR 20-MAR-2000; 2000WO-US005841.
 PR 30-MAR-2000; 2000WO-US007377.
 PR 22-MAY-2000; 2000WO-US008439.
 PR 02-JUN-2000; 2000WO-US014042.
 PR 28-JUL-2000; 2000WO-US015264.
 PR 24-AUG-2000; 2000WO-US020710.
 PR 18-SEP-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.

(GETH) GENENTECH INC.

PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Pilyarsky E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PU, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin LJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI William PM, Wood WI;

WPI; 2003-615762/58.

PT Novel secreted and transmembrane polypeptide for modulating biological
 PT activity of cell expressing the polypeptide, identifying agonists or
 PT antagonists of polypeptide, and as molecular weight markers.

XX Example 36; SEQ ID NO 229; 476pp; English.

CC The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or PFA uptake, inducing proliferation and/or re
 CC differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypotension, or bone or cartilage disorders (e.g. sports injuries or

CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 1.7e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCCTCAGGGGAG 1116

|||||

DB 3 GCTGTCACAGGGGAG 18

RESULT 1919

ADC34375

ID ADC34375 standard; DNA; 18 BP.

XX AC ADC34375;

DT 18-DEC-2003 (first entry)

XX DE Human secreted/transmembrane protein, #44, PCR primer #2.

KW Human; PCR; primer; as; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; PFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypotension; hypotension; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiac; vulnary; cyrostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.

XX OS Homo sapiens.

XX PN US2003036094-A1.

XX PD 20-FEB-2003.

XX PF 13-JUL-2001; 2001US-00904820.

XX PR 17-SEP-1997; 97US-0059113P.

XX PR 17-SEP-1997; 97US-0059115P.

XX PR 17-SEP-1997; 97US-0059117P.

XX PR 17-SEP-1997; 97US-0059119P.

XX PR 17-SEP-1997; 97US-0059121P.

XX PR 17-SEP-1997; 97US-0059122P.

XX PR 17-SEP-1997; 97US-0059184P.

XX PR 18-SEP-1997; 97US-0059263P.

XX PR 18-SEP-1997; 97US-0059266P.

XX PR 15-OCT-1997; 97US-0062125P.

PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 10-SEP-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.

02-MAR-2000; 2000WO-US005941.
 20-MAR-2000; 2000WO-US007377.
 30-MAR-2000; 2000WO-US008439.
 22-MAY-2000; 2000WO-US014042.
 02-JUN-2000; 2000WO-US015264.
 28-JUL-2000; 2000WO-US020710.
 24-AUG-2000; 2000WO-US023328.
 18-SEP-2000; 2000US-00665350.
 (GETH) GENENTECH INC.
 Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Klijavin IJ;
 Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 Williams PM, Wood WI;
 WPI; 2003-615763/59.
 Novel secreted and transmembrane polypeptides and polynucleotides
 encoding them useful for treating cancers, asthma, rheumatoid arthritis,
 neurological diseases, and skin diseases.
 Example 36; SEQ ID NO 229; 478pp; English.
 The invention discloses isolated PRO secreted/transmembrane polypeptides
 and the nucleic acid encoding them. The polypeptides can be used to raise
 antibodies that specifically bind to the PRO polypeptide, for linking a
 bioactive molecule to a cell expressing a PRO protein and for modulating
 at least one biological activity of a cell. PRO polypeptides are useful
 for detecting other PRO polypeptides in a sample and for linking a
 bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 polypeptide antibodies are useful for modulating the biological activity
 of a cell expressing PRO polypeptides. The PRO polypeptides or
 polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 bioeffectors. These are useful for stimulating hypertrophy of neonatal
 heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 proliferation of endothelial cells, modulating the survival or proliferation of
 stimulated T-lymphocytes, enhancing the survival or proliferation of
 retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 -differentiation of chondrocytes. In particular, these are useful for
 detecting or treating cardiac insufficiency disorders, wounds, cancerous
 tumours, retinal disorders or injuries (e.g. loss of sight due to
 retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 hypotension, or bone or cartilage disorders (e.g. sports injuries or
 arthritis) in mammals. PRO polypeptides and their portions affect the
 expression of genes which have a role in cell death. The polynucleotides
 are useful in molecular biology including uses as hybridisation probes
 for cDNA library to isolate the full-length PRO cDNA or to isolate other
 cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 and DNA, for preparing PRO polypeptides, for generating transgenic
 animals or knockout animals which are useful in the development and
 screening of therapeutically useful reagents, as probes and for the
 genetic analysis of individuals with genetic disorders as well as for
 recombinantly expressing the protein and for chromosome identification.
 The proteins are useful as molecular marker for protein electrophoresis
 purposes, as therapeutic agents, for screening compounds to identify
 those that mimic the PRO polypeptide (agonists) or prevent the effect of
 the PRO polypeptide (antagonists). The polynucleotides and proteins are
 useful for tissue typing. PRO antibodies are useful for
 immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 antibodies are useful in diagnostic assays for PRO e.g. detecting its
 expression in specific cells, tissues or serum and for affinity
 purification of PRO from recombinant cell culture or natural sources. The
 PRO genes may also be used in gene therapy, particularly for replacing a
 defective gene. The sequence presented is a PCR primer which was used to
 amplify a PRO polynucleotide of the invention.
 Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCCTCAGGGAG 1116
 Db 3 GCTGTCACAGGGAG 18
 RESULT 1920
 ADC29430
 ID ADC29430 standard; DNA; 18 BP.
 XX
 AC ADC29430;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Human secreted/transmembrane protein, #44, PCR primer #2.
 XX
 KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypotension; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cartilage; vulnary; cytostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.
 XX
 OS Homo sapiens.
 XX
 PN US2003049676-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 10-JUL-2001; 2001US-00902736.
 XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 21-OCT-1997; 97US-0062287P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 28-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.

PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0068120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0068772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 14-SEP-1998; 98US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
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 PR 22-DEC-1998; 98US-0113296P.
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 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.
 PA (GETH) GENENTECH INC.
 PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Pilvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
 PI Mather JP, Pan J, Paoni NF, Ann Roy M, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2003-595107/55.
 DR Novel isolated PRO polypeptides e.g. PRO234 (useful for treating
 XX rheumatoid arthritis, psoriasis and multiple sclerosis) and PRO187
 PT (useful for treating Alzheimer's disease, cancer).
 PT Example 36; SEQ ID NO 229; 451pp; English.
 PS The invention discloses isolated PRO secreted/transmembrane polypeptides
 XX and the nucleic acid encoding them. The polypeptides can be used to raise
 CC

CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 CC differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypoparathyroidism, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCTCTCAGGGGAG 1116
 Db 3 GCTGTCTCAGGGGAG 18
 RESULT 1921
 ADC28961
 ID ADC28961 standard; DNA; 18 BP.
 XX
 AC ADC28961;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Human secreted/transmembrane protein, #44, PCR primer #2.
 XX
 KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypoparathyroidism; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiac; vulnary; cytostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.

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|----|---|------------------|--------------|------------------|
| XX | Homo sapiens. | 99US-0145698P. | 26-JUL-1999; | 99US-0145698P. |
| OS | | 99US-0146222P. | 28-JUL-1999; | 99US-0146222P. |
| XX | | 99WO-US020594. | 08-SEP-1999; | 99WO-US020594. |
| PN | | 99WO-US020944. | 13-SEP-1999; | 99WO-US020944. |
| XX | | 99WO-US021090. | 15-SEP-1999; | 99WO-US021090. |
| XX | | 99WO-US021547. | 15-SEP-1999; | 99WO-US021547. |
| XX | | 99WO-US023089. | 05-OCT-1999; | 99WO-US023089. |
| XX | | 99WO-US028214. | 29-NOV-1999; | 99WO-US028214. |
| XX | | 99WO-US028313. | 30-NOV-1999; | 99WO-US028313. |
| XX | | 99WO-US028301. | 01-DEC-1999; | 99WO-US028301. |
| XX | | 99WO-US028564. | 02-DEC-1999; | 99WO-US028564. |
| XX | | 99WO-US028565. | 02-DEC-1999; | 99WO-US028565. |
| XX | | 99WO-US030095. | 16-DEC-1999; | 99WO-US030095. |
| XX | | 99WO-US030911. | 20-DEC-1999; | 99WO-US030911. |
| XX | | 99WO-US030999. | 20-DEC-1999; | 99WO-US030999. |
| XX | | 2000WO-US000219. | 05-JAN-2000; | 2000WO-US000219. |
| XX | | 2000WO-US003565. | 11-FEB-2000; | 2000WO-US003565. |
| XX | | 2000WO-US004414. | 22-FEB-2000; | 2000WO-US004414. |
| XX | | 2000WO-US005004. | 24-FEB-2000; | 2000WO-US005004. |
| XX | | 2000WO-US005841. | 02-MAR-2000; | 2000WO-US005841. |
| XX | | 2000WO-US007377. | 20-MAR-2000; | 2000WO-US007377. |
| XX | | 2000WO-US008439. | 30-MAR-2000; | 2000WO-US008439. |
| XX | | 2000WO-US014042. | 22-MAY-2000; | 2000WO-US014042. |
| XX | | 2000WO-US015264. | 02-JUN-2000; | 2000WO-US015264. |
| XX | | 2000WO-US020710. | 28-JUL-2000; | 2000WO-US020710. |
| XX | | 2000WO-US023328. | 24-AUG-2000; | 2000WO-US023328. |
| XX | | 2000US-00665350. | 18-SEP-2000; | 2000US-00665350. |
| XX | | | | |
| XX | (GETH) GENENTECH INC. | | | |
| XX | | | | |
| XX | Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; | | | |
| XX | Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; | | | |
| XX | Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, KJlavin IJ; | | | |
| XX | Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; | | | |
| XX | Williams PM, Wood WI; | | | |
| XX | | | | |
| XX | WPI; 2003-615797/58. | | | |
| XX | | | | |
| XX | Novel secreted and transmembrane polypeptides and polynucleotides | | | |
| XX | encoding them useful for treating skin, neurodegenerative diseases, as an | | | |
| XX | antithrombotic agent and for inducing endothelial cell apoptosis. | | | |
| XX | | | | |
| XX | Example 36; SEQ ID NO 229; 470pp; English. | | | |
| XX | | | | |
| XX | The invention discloses isolated PRO secreted/transmembrane polypeptides | | | |
| XX | and the nucleic acid encoding them. The polypeptides can be used to raise | | | |
| XX | antibodies that specifically bind to the PRO polypeptide, for linking a | | | |
| XX | bioactive molecule to a cell expressing a PRO protein and for modulating | | | |
| XX | at least one biological activity of a cell. PRO polypeptides are useful | | | |
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| XX | bioreactors. These are useful for stimulating hypertrophy of neonatal | | | |
| XX | heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated | | | |
| XX | proliferation of endothelial cells, modulating the proliferation of | | | |
| XX | stimulated T-lymphocytes, enhancing the survival or proliferation of | | | |
| XX | retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial | | | |
| XX | cells, modulating glucose or FFA uptake, inducing proliferation and/or re | | | |
| XX | -differentiation of chondrocytes. In particular, these are useful for | | | |
| XX | detecting or treating cardiac insufficiency disorders, wounds, cancerous | | | |
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| XX | retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia, | | | |
| XX | hypoinulinaemia, or bone or cartilage disorders (e.g. sports injuries or | | | |
| XX | arthritis) in mammals. PRO polypeptides and their portions affect the | | | |
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CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
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CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a PCR primer which was used to
CC amplify a PRO polynucleotide of the invention.

XX
SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. NO. 1.7e+03;
Matches: 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1101 GCTGCTCTCAGGGGAG 1116
Db 3 GCTGCTCAGGGGAG 18
|||||

RESULT 1922

ADC40846

ID ADC40846 standard; DNA; 18 BP.

XX ADC40846;

XX 18-DEC-2003 (first entry)

DE Human secreted/transmembrane protein, #44, PCR primer #2.

XX Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; PFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
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KW hypotinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiac; vulnary; cyostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.

XX Homo sapiens.

OS US2003054400-A1.

PN 20-MAR-2003.

PD 10-JUL-2001; 2001US-00902692.

XX 17-SEP-1997; 97US-0059113P.

XX 17-SEP-1997; 97US-0059117P.

XX 17-SEP-1997; 97US-0059119P.

XX 17-SEP-1997; 97US-0059122P.

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PR 24-OCT-1997; 97US-0063127P.
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PR 28-OCT-1997; 97US-0063542P.
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PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
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PR 10-SEP-1998; 98US-0099803P.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98US-0100262P.
PR 16-SEP-1998; 98US-0100262P.
PR 16-SEP-1998; 98US-0100262P.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98US-0100858P.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98US-0109304P.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 98US-0143048P.
PR 26-JUL-1999; 98US-0145698P.
PR 28-JUL-1999; 98US-0145698P.
PR 13-SEP-1999; 99US-0148222P.
PR 15-SEP-1999; 99US-0148222P.
PR 15-SEP-1999; 99US-0148222P.
PR 05-OCT-1999; 99US-0148222P.
PR 29-NOV-1999; 99US-0148222P.
PR 30-NOV-1999; 99US-0148222P.
PR 01-DEC-1999; 99US-0148222P.
PR 02-DEC-1999; 99US-0148222P.
PR 08-DEC-1999; 99US-0148222P.
PR 16-DEC-1999; 99US-0148222P.
PR 20-DEC-1999; 99US-0148222P.
PR 20-DEC-1999; 99US-0148222P.
PR 05-JAN-2000; 2000US-0000219.
PR 11-FEB-2000; 2000US-0000219.
PR 22-FEB-2000; 2000US-0000219.
PR 24-FEB-2000; 2000US-0000219.
PR 02-MAR-2000; 2000US-0000219.
PR 20-MAR-2000; 2000US-0000219.
PR 30-MAR-2000; 2000US-0000219.
PR 22-MAY-2000; 2000US-0000219.
PR 02-JUN-2000; 2000US-0000219.
PR 28-JUL-2000; 2000US-0000219.
PR 24-AUG-2000; 2000US-0000219.
PR 18-SEP-2000; 2000US-0000219.

XX (GETH) GENENTECH INC.

XX Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fildes E, Fong S, Gao W, Gerber H, Gerritsen KE, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kijavits IJ, Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D, Williams PM, Wood WJ, WPI; 2003-708343/67.

XX Novel PRO polypeptides useful for treating Parkinson's disease, Alzheimer's disease, enterocolitis, Zollinger-Ellison syndrome, psoriasis, epidermoid carcinoma of the vulva and gliomas, gynecological diseases.

XX Example 36; SEQ ID NO 229; 473pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides and the nucleic acid encoding them. The polypeptides can be used to raise antibodies that specifically bind to the PRO polypeptide, for linking a bioactive molecule to a cell expressing a PRO protein and for modulating at least one biological activity of a cell. PRO polypeptides are useful for detecting other PRO polypeptides in a sample and for linking a bioactive molecule to a cell expressing a PRO polypeptide. The PRO polypeptide antibodies are useful for modulating the biological activity of a cell expressing PRO polypeptides. The PRO polypeptides or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioeffectors. These are useful for stimulating hypertrophy of neonatal heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated proliferation of endothelial cells, modulating the proliferation of stimulated T-lymphocytes, enhancing the survival or proliferation of retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial cells, modulating glucose or FFA uptake, inducing proliferation and/or re-differentiation of chondrocytes. In particular, these are useful for detecting or treating cardiac insufficiency disorders, wounds, cancerous tumours, retinal disorders or injuries (e.g. loss of sight due to retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia, hypoparathyroidism, or bone or cartilage disorders (e.g. sports injuries or arthritis) in mammals. PRO polypeptides and their portions affect the expression of genes which have a role in cell death. The polynucleotides are useful in molecular biology including uses as hybridisation probes for cDNA library to isolate the full-length PRO cDNA or to isolate other cDNAs, in chromosome and gene mapping, in the generation of antisense RNA and DNA, for preparing PRO polypeptides, for generating transgenic animals or knockout animals which are useful in the development and screening of therapeutically useful reagents, as probes and for the genetic analysis of individuals with genetic disorders as well as for recombinantly expressing the protein and for chromosome identification. The proteins are useful as molecular marker for protein electrophoresis purposes, as therapeutic agents, for screening compounds to identify those that mimic the PRO polypeptide (agonists) or prevent the effect of the PRO polypeptide (antagonists). The polynucleotides and proteins are useful for tissue typing. PRO antibodies are useful for immunohistochemical staining and/or assay of sample fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The sequence presented is a PCR primer which was used to amplify a PRO polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCTCTCAGGGGAG 1116
DB 3 GCTGTCTCAGGGGAG 18

RESULT 1923

ADC19503

ID ADC19503 standard; DNA; 18 BP.

XX AC ADC19503;

XX DT 18-DEC-2003 (first entry)

XX DE Human secreted/transmembrane protein, #44, PCR primer #2.

XX KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic; tissue typing; immunohistochemical staining; gene therapy; neonatal heart; vascular endothelial growth factor; VEGF; proliferation; endothelial cell; stimulated T-lymphocyte; retinal neuron; rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte; cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder; retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia; hypoparathyroidism; bone disorder; cartilage disorder; sport injury; arthritis; cardiac; vulvar; cytostatic; ophthalmological; osteopathic; antiarthritic; anorectic.

XX OS Homo sapiens.

XX US2003054441-A1.

XX 20-MAR-2003.

XX 12-JUL-2001; 2001US-00905056.

XX 17-SEP-1997; 97US-0059113P.

XX 17-SEP-1997; 97US-0059115P.

XX 17-SEP-1997; 97US-0059117P.

XX 17-SEP-1997; 97US-0059119P.

XX 17-SEP-1997; 97US-0059121P.

XX 17-SEP-1997; 97US-0059122P.

XX 17-SEP-1997; 97US-0059184P.

XX 18-SEP-1997; 97US-0059263P.

XX 15-OCT-1997; 97US-0059266P.

XX 15-OCT-1997; 97US-0062125P.

XX 17-OCT-1997; 97US-0062285P.

XX 17-OCT-1997; 97US-0062287P.

XX 21-OCT-1997; 97US-0063486P.

XX 24-OCT-1997; 97US-0062814P.

XX 24-OCT-1997; 97US-0062816P.

XX 24-OCT-1997; 97US-0063045P.

XX 24-OCT-1997; 97US-0063120P.

XX 24-OCT-1997; 97US-0063121P.

XX 24-OCT-1997; 97US-0063127P.

XX 24-OCT-1997; 97US-0063128P.

XX 27-OCT-1997; 97US-0063327P.

XX 28-OCT-1997; 97US-0063329P.

XX 28-OCT-1997; 97US-0063541P.

XX 28-OCT-1997; 97US-0063542P.

XX 28-OCT-1997; 97US-0063544P.

XX 28-OCT-1997; 97US-0063549P.

XX 28-OCT-1997; 97US-0063550P.

XX 28-OCT-1997; 97US-0063564P.

XX 29-OCT-1997; 97US-0063435P.

XX 29-OCT-1997; 97US-0063704P.

XX 29-OCT-1997; 97US-0063732P.

XX 29-OCT-1997; 97US-0063734P.

XX 29-OCT-1997; 97US-0063735P.

XX 29-OCT-1997; 97US-0063738P.

XX 29-OCT-1997; 97US-0064215P.

XX 31-OCT-1997; 97US-0063870P.

XX 31-OCT-1997; 97US-0064103P.

XX 03-NOV-1997; 97US-0064248P.

XX 07-NOV-1997; 97US-0064809P.

XX 12-NOV-1997; 97US-0065186P.

XX 17-NOV-1997; 97US-0065846P.

XX 18-NOV-1997; 97US-0065693P.

XX 21-NOV-1997; 97US-0066120P.

XX 21-NOV-1997; 97US-0066364P.

CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCCTCAGGGGAG 1116
 |||||
 Db 3 GCTGTCACAGGGGAG 18

RESULT 1925

ADCL3021

ID ADCL3021 standard; DNA; 18 BP.

XX ADCL3021;

DT 18-DEC-2003 (first entry)

DE Human secreted/transmembrane protein, #44, PCR primer #2.

XX Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; PFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypotension; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiac; vulvar; cytostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.

OS Homo sapiens.

XX US2003073079-A1.

XX 17-APR-2003.

XX 17-JUL-2001; 2001US-00907575.

XX 17-SEP-1997; 97US-0059113P.

XX 17-SEP-1997; 97US-0059115P.

XX 17-SEP-1997; 97US-0059117P.

XX 17-SEP-1997; 97US-0059119P.

XX 17-SEP-1997; 97US-0059121P.

XX 17-SEP-1997; 97US-0059122P.

XX 18-SEP-1997; 97US-0059263P.

XX 18-SEP-1997; 97US-0059266P.

XX 15-OCT-1997; 97US-0062125P.

XX 17-OCT-1997; 97US-0062285P.

XX 17-OCT-1997; 97US-0062287P.

XX 21-OCT-1997; 97US-0063486P.

XX 24-OCT-1997; 97US-0062814P.

XX 24-OCT-1997; 97US-0062816P.

XX 24-OCT-1997; 97US-0063045P.

XX 24-OCT-1997; 97US-0063420P.

XX 24-OCT-1997; 97US-0063121P.

XX 24-OCT-1997; 97US-0063127P.

XX 27-OCT-1997; 97US-0063327P.

XX 27-OCT-1997; 97US-0063329P.

XX 28-OCT-1997; 97US-0063541P.

XX 28-OCT-1997; 97US-0063542P.

XX 28-OCT-1997; 97US-0063544P.

PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066709P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 14-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 16-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 05-OCT-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.

(GETH) GENENTECH INC.

Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kijavini IJ;
 Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;

PI Williams PM, Wood WI;
XX WPI; 2003-743809/70.
XX
XX Novel isolated secreted and transmembrane PRO polypeptides e.g. PRO245
PT and PRO1868, useful for treating e.g. Parkinson's disease, Alzheimer's
PT disease, amyotrophic lateral sclerosis, cancer, neuropathies, diabetes and
PT psoriasis.
XX
XX Example 36; SEQ ID NO 229; 473pp; English.
XX
XX The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the survival or proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
CC hypotension, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a PCR primer which was used to
CC amplify a PRO polynucleotide of the invention.
XX
SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. NO. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1101 GCTGTCTCTCAGGGGAG 1116
Db 3 GCTGTCTCAGGGGAG 18
RESULT 1926
ADC12473
ID ADC12473 standard; DNA; 18 BP.
XX
XX ADC12473;
AC
XX 18-DEC-2003 (first entry)
DT

XX Human secreted/transmembrane protein, #44, PCR primer #2.
DE
XX Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia; injury;
KW hypotension; bone disorder; cartilage disorder; sport injury;
KW arthritis; cartilag; vulnary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
OS
XX Homo sapiens.
XX US2003082541-A1.
PN
XX 01-MAY-2003.
PD
XX 10-JUL-2001; 2001US-00902713.
PF
XX 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059123P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.

| | | | | |
|----|---|------------------|----|--|
| PR | 04-JUN-1998; | 98US-0088026P. | CC | -differentiation of chondrocytes. In particular, these are useful for |
| PR | 10-SEP-1998; | 98US-0099803P. | CC | detecting or treating cardiac insufficiency disorders, wounds, cancerous |
| PR | 10-SEP-1998; | 98WO-US0118824. | CC | tumours, retinal disorders or injuries (e.g. loss of sight due to |
| PR | 14-SEP-1998; | 98US-0100262P. | CC | retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia, |
| PR | 14-SEP-1998; | 98WO-US0119177. | CC | hypopinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or |
| PR | 16-SEP-1998; | 98WO-US0119330. | CC | arthritis) in mammals. PRO polypeptides and their portions affect the |
| PR | 17-SEP-1998; | 98US-0100858P. | CC | expression of genes which have a role in cell death. The polynucleotides |
| PR | 17-SEP-1998; | 98WO-US0119437. | CC | are useful in molecular biology including uses as hybridisation probes |
| PR | 13-OCT-1998; | 98US-0104080P. | CC | for cDNA library to isolate the full-length PRO cDNA or to isolate other |
| PR | 20-NOV-1998; | 98US-0109304P. | CC | cDNAs, in chromosome and gene mapping, in the generation of antisense RNA |
| PR | 01-DEC-1998; | 98WO-US025108. | CC | and DNA, for preparing PRO polypeptides, for generating transgenic |
| PR | 22-DEC-1998; | 98US-0113266P. | CC | animals or knockout animals which are useful in the development and |
| PR | 07-JUL-1999; | 99US-0143048P. | CC | screening of therapeutically useful reagents, as probes and for the |
| PR | 26-JUL-1999; | 99US-0145698P. | CC | genetic analysis of individuals with genetic disorders as well as for |
| PR | 28-JUL-1999; | 99US-0146222P. | CC | recombinantly expressing the protein and for chromosome identification. |
| PR | 08-SEP-1999; | 99WO-US020594. | CC | The proteins are useful as molecular marker for protein electrophoresis |
| PR | 13-SEP-1999; | 99WO-US020944. | CC | purposes, as therapeutic agents, for screening compounds to identify |
| PR | 15-SEP-1999; | 99WO-US021090. | CC | those that mimic the PRO polypeptide (agonists) or prevent the effect of |
| PR | 15-SEP-1999; | 99WO-US021547. | CC | the PRO polypeptide (antagonists). The polynucleotides are useful for |
| PR | 05-OCT-1999; | 99WO-US023089. | CC | useful for tissue typing. PRO antibodies are useful for |
| PR | 29-NOV-1999; | 99WO-US028214. | CC | immunohistochemical staining and/or assay of sample fluids. Anti-PRO |
| PR | 30-NOV-1999; | 99WO-US028313. | CC | antibodies are useful in diagnostic assays for PRO e.g. detecting its |
| PR | 01-DEC-1999; | 99WO-US028301. | CC | expression in specific cells, tissues or serum and for affinity |
| PR | 02-DEC-1999; | 99WO-US028564. | CC | purification of PRO from recombinant cell culture or natural sources. The |
| PR | 02-DEC-1999; | 99WO-US028565. | CC | PRO genes may also be used in gene therapy, particularly for replacing a |
| PR | 16-DEC-1999; | 99WO-US030095. | CC | defective gene. The sequence presented is a PCR primer which was used to |
| PR | 20-DEC-1999; | 99WO-US030911. | CC | amplify a PRO polynucleotide of the invention. |
| PR | 20-DEC-1999; | 99WO-US030999. | XX | |
| PR | 05-JAN-2000; | 2000WO-US000219. | SQ | Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other; |
| PR | 11-FEB-2000; | 2000WO-US003565. | | |
| PR | 22-FEB-2000; | 2000WO-US004414. | | |
| PR | 24-FEB-2000; | 2000WO-US005004. | | |
| PR | 02-MAR-2000; | 2000WO-US005841. | | |
| PR | 20-MAR-2000; | 2000WO-US007377. | | |
| PR | 30-MAR-2000; | 2000WO-US008439. | | |
| PR | 22-MAY-2000; | 2000WO-US014042. | | |
| PR | 02-JUN-2000; | 2000WO-US015264. | | |
| PR | 28-JUL-2000; | 2000WO-US020710. | | |
| PR | 24-AUG-2000; | 2000WO-US023328. | | |
| PR | 18-SEP-2000; | 2000US-00665350. | | |
| XX | | | | |
| PA | (GETH) GENENTECH INC. | | | |
| XX | | | | |
| PI | Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; | | | |
| PI | Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; | | | |
| PI | Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Klijavin LJ; | | | |
| PI | Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; | | | |
| PI | Williams PM, Wood WI; | | | |
| XX | | | | |
| DR | WPI; 2003-743881/70. | | | |
| XX | | | | |
| XX | | | | |
| PT | New secreted transmembrane PRO polypeptides and nucleic acids encoding | | | |
| PT | the polypeptides, useful in gene therapy, in identifying chromosomes, as | | | |
| PT | chromosome markers, in generating probes and in tissue typing. | | | |
| XX | | | | |
| PS | Example 36; SEQ ID NO 229; 487bp; English. | | | |
| XX | | | | |
| CC | The invention discloses isolated PRO secreted/transmembrane polypeptides | | | |
| CC | and the nucleic acid encoding them. The polypeptides can be used to raise | | | |
| CC | antibodies that specifically bind to the PRO polypeptide, for linking a | | | |
| CC | bioactive molecule to a cell expressing a PRO protein and for modulating | | | |
| CC | at least one biological activity of a cell. PRO polypeptides are useful | | | |
| CC | for detecting other PRO polypeptides in a sample and for linking a | | | |
| CC | bioactive molecule to a cell expressing a PRO polypeptide. The PRO | | | |
| CC | polypeptide antibodies are useful for modulating the biological activity | | | |
| CC | of a cell expressing PRO polypeptides. The PRO polypeptides or | | | |
| CC | polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or | | | |
| CC | bioeffectors. These are useful for stimulating hypertrophy of neonatal | | | |
| CC | heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated | | | |
| CC | proliferation of endothelial cells, modulating the proliferation of | | | |
| CC | stimulated T-lymphocytes, enhancing the survival or proliferation of | | | |
| CC | retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial | | | |
| CC | cells, modulating glucose or FFA uptake, inducing proliferation and/or re | | | |

| | | | | | |
|-------------|--|-----------------------|--------------------|-----------|------------|
| CC | Query Match | 0.4%; | Score 14.4; | DB 1; | Length 18; |
| CC | Best Local Similarity | 93.8%; | Pred. No. 1.7e+03; | | |
| CC | Matches 15; | Conservative 0; | Mismatches 1; | Indels 0; | Gaps 0; |
| QY | 1101 | GCTGTCTTCACGGGAG | 1116 | | |
| Db | 3 | GCTGTCCACACGGGAG | 18 | | |
| | | | | | |
| | | | | | |
| RESULT 1927 | | | | | |
| ADD05028 | | | | | |
| ID | ADD05028 | standard; DNA; 18 BP. | | | |
| XX | | | | | |
| AC | ADD05028; | | | | |
| XX | | | | | |
| DT | 01-JAN-2004 | (first entry) | | | |
| XX | | | | | |
| DE | Human secreted/transmembrane protein, #44, PCR primer #2. | | | | |
| XX | | | | | |
| KW | Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic; | | | | |
| KW | tissue typing; immunohistochemical staining; gene therapy; | | | | |
| KW | neonatal heart; vascular endothelial growth factor; VEGF; proliferation; | | | | |
| KW | endothelial cell; stimulated T-lymphocytes; retinal neuron; | | | | |
| KW | rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte; | | | | |
| KW | cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder; | | | | |
| KW | retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia; | | | | |
| KW | hypopinsulinaemia; bone disorder; cartilage disorder; sport injury; | | | | |
| KW | arthritis; cardiac; vulnery; cytostatic; ophthalmological; | | | | |
| KW | osteopathic; antiarthritic; anorectic. | | | | |
| OS | Homo sapiens. | | | | |
| XX | | | | | |
| XX | US2003104469-A1. | | | | |
| PN | | | | | |
| XX | 05-JUN-2003. | | | | |
| PD | | | | | |
| XX | | | | | |
| XX | 17-JUL-2001; 2001US-00907652. | | | | |
| PF | | | | | |
| XX | 17-SEP-1997; 97US-0059113P. | | | | |
| PR | 17-SEP-1997; 97US-0059115P. | | | | |
| PR | 17-SEP-1997; 97US-0059117P. | | | | |
| PR | 17-SEP-1997; 97US-0059119P. | | | | |
| PR | 17-SEP-1997; 97US-0059121P. | | | | |

PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 18-SEP-1997; 97US-0062225P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063341P.
PR 28-OCT-1997; 97US-0063342P.
PR 28-OCT-1997; 97US-0063344P.
PR 28-OCT-1997; 97US-0063349P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065893P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98US-0099803P.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98US-0100262P.
PR 16-SEP-1998; 98US-0101917P.
PR 17-SEP-1998; 98US-0101930P.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98US-0101943P.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 21-DEC-1998; 98US-0025108P.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 26-JUL-1999; 99US-0146222P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99US-0205094P.
PR 13-SEP-1999; 99US-0205094P.
PR 15-SEP-1999; 99US-0201090P.
PR 15-SEP-1999; 99US-0201547P.
PR 05-OCT-1999; 99US-0203089P.
PR 29-NOV-1999; 99US-0202821P.
PR 30-NOV-1999; 99US-0202813P.
PR 01-DEC-1999; 99US-0202830P.
PR 02-DEC-1999; 99US-0202856P.
PR 02-DEC-1999; 99US-0202856P.
PR 16-DEC-1999; 99US-0203009P.
PR 20-DEC-1999; 99US-0203091P.

PR 20-DEC-1999; 99US-0203099P.
PR 05-JAN-2000; 2000US-0000219P.
PR 11-FEB-2000; 2000US-0000356P.
PR 22-FEB-2000; 2000US-0000414P.
PR 24-FEB-2000; 2000US-0000500P.
PR 02-MAR-2000; 2000US-0000584P.
PR 20-MAR-2000; 2000US-0000737P.
PR 30-MAR-2000; 2000US-0000843P.
PR 22-MAY-2000; 2000US-0001404P.
PR 02-JUN-2000; 2000US-0001526P.
PR 28-JUL-2000; 2000US-0002071P.
PR 24-AUG-2000; 2000US-0002338P.
PR 18-SEP-2000; 2000US-0006535P.

(GETH) GENENTECH INC.

PA Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kijavini IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX WPI; 2003-801231/75.

XX Novel isolated native PRO polypeptide useful for tissue typing,
PT modulating biological activity of cell, as molecular weight markers in
PT protein electrophoresis, for treating enterocolitis, Zollinger-Ellison
PT syndrome.

XX Example 36; SEQ ID NO 229; 474pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
and the nucleic acid encoding them. The polypeptides can be used to raise
antibodies that specifically bind to the PRO polypeptide, for linking a
bioactive molecule to a cell expressing a PRO protein and for modulating
at least one biological activity of a cell. PRO polypeptides are useful
for detecting other PRO polypeptides in a sample and for linking a
bioactive molecule to a cell expressing a PRO polypeptide. The PRO
polypeptide antibodies are useful for modulating the biological activity
of a cell expressing PRO polypeptides. The PRO polypeptides or
polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
bioeffectors. These are useful for stimulating hypertrophy of neonatal
heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
proliferation of endothelial cells, modulating the proliferation of
stimulated T-lymphocytes, enhancing the survival or proliferation of
retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
cells, modulating glucose or PFA uptake, inducing proliferation and/or re
differentiation of chondrocytes. In particular, these are useful for
detecting or treating cardiac insufficiency disorders, wounds, cancerous
tumours, retinal disorders or injuries (e.g. loss of sight due to
retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
hypoparathyroidism, or bone or cartilage disorders (e.g. sports injuries or
arthritis) in mammals. PRO polypeptides and their portions affect the
expression of genes which have a role in cell death. The polynucleotides
are useful in molecular biology including uses as hybridisation probes
for cDNA library to isolate the full-length PRO cDNA or to isolate other
cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
and DNA, for preparing PRO polypeptides, for generating transgenic
animals or knockout animals which are useful in the development and
screening of therapeutically useful reagents, as probes and for the
genetic analysis of individuals with genetic disorders as well as for
recombinantly expressing the protein and for chromosome identification.
The proteins are useful as molecular marker for protein electrophoresis
purposes, as therapeutic agents, for screening compounds to identify
those that mimic the PRO polypeptide (agonists) or prevent the effect of
the PRO polypeptide (antagonists). The polynucleotides and proteins are
useful for tissue typing. PRO antibodies are useful for
immunohistochemical staining and/or assay of sample fluids. Anti-PRO
antibodies are useful in diagnostic assays for PRO e.g. detecting its
expression in specific cells, tissues or serum and for affinity
purification of PRO from recombinant cell culture or natural sources. The
PRO genes may also be used in gene therapy, particularly for replacing a
defective gene. The sequence presented is a PCR primer which was used to

CC amplify a PRO polynucleotide of the invention.

SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCTCTCAGGGGAG 1116

Db 3 GCTGTCCACAGGGGAG 18

RESULT 1928

ADD04034

ID ADD04034 standard; DNA; 18 BP.

AC ADD04034;

DT 01-JAN-2004 (first entry)

XX Human secreted/transmembrane protein, #44, PCR primer #2.

XX Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;

KW tissue typing; immunohistochemical staining; gene therapy;

KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;

KW endothelial cell; stimulated T-lymphocyte; retinal neuron;

KW rod photoreceptor cell; c-fos; glucose; PFA; chondrocyte;

KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;

KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;

KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;

KW arthritis; cardiant; vulnerability; cytosatic; ophthalmological;

KW osteopathic; antiarthritic; anorectic.

XX Homo sapiens.

XX OS

XX US2003104381-A1.

XX PD

XX 05-JUN-2003.

XX PF 11-JUL-2001; 2001US-00903823.

XX PR 17-SEP-1997; 97US-0059113P.

PR 17-SEP-1997; 97US-0059115P.

PR 17-SEP-1997; 97US-0059117P.

PR 17-SEP-1997; 97US-0059119P.

PR 17-SEP-1997; 97US-0059121P.

PR 17-SEP-1997; 97US-0059122P.

PR 17-SEP-1997; 97US-0059184P.

PR 18-SEP-1997; 97US-0059263P.

PR 18-SEP-1997; 97US-0059266P.

PR 15-OCT-1997; 97US-0062125P.

PR 17-OCT-1997; 97US-0062285P.

PR 17-OCT-1997; 97US-0062287P.

PR 21-OCT-1997; 97US-0063486P.

PR 24-OCT-1997; 97US-0062814P.

PR 24-OCT-1997; 97US-0062816P.

PR 24-OCT-1997; 97US-0063045P.

PR 24-OCT-1997; 97US-0063120P.

PR 24-OCT-1997; 97US-0063121P.

PR 24-OCT-1997; 97US-0063127P.

PR 24-OCT-1997; 97US-0063128P.

PR 27-OCT-1997; 97US-0063327P.

PR 28-OCT-1997; 97US-0063329P.

PR 28-OCT-1997; 97US-0063441P.

PR 28-OCT-1997; 97US-0063542P.

PR 28-OCT-1997; 97US-0063544P.

PR 28-OCT-1997; 97US-0063549P.

PR 28-OCT-1997; 97US-0063550P.

PR 28-OCT-1997; 97US-0063564P.

PR 29-OCT-1997; 97US-0063435P.

PR 29-OCT-1997; 97US-0063704P.

PR 29-OCT-1997; 97US-0063732P.

PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 18-SEP-1998; 98WO-US018824.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 24-FEB-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.

(GETH) GENENTECH INC.

Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;

Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;

Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin LJ;

Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;

PI Williams PM, Wood WI;

XX WPI; 2003-801226/75.

XX Novel isolated native PRO polypeptide useful for treating Parkinson's
PT disease, enterocolitis, Zollinger-Ellison syndrome gastrointestinal

PT ulceration, Alzheimer's disease, amyotrophic lateral sclerosis, Usher
 PT syndrome.
 XX Example 36; SEQ ID NO 229; 487pp; English.
 CC The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 CC differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypotension, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

-QY 1101 GCTGTCCTCAGGGGAG 1116

Db 3 GCTGTCACAGGGGAG 18

RESULT 1929

ADD03610

ID ADD03610 standard; DNA; 18 BP.

XX ADD03610;

XX 01-JAN-2004 (first entry)

DT Human secreted/transmembrane protein, #44, PCR primer #2.

DE Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;

KW tissue typing; immunohistochemical staining; gene therapy;

KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;

KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia; injury;
 KW hypotension; bone disorder; cartilage disorder; sport injury;
 KW arthritis; carditis; vulnary; cytostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.
 XX Homo sapiens.
 XX US2003108983-A1.
 PN 12-JUN-2003.
 PD 10-JUL-2001; 2001US-00902572.
 XX 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
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 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
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 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
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 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 12-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 10-SEP-1998; 98WO-US01882P.
 PR 14-SEP-1998; 98US-0100262P.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.

PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98WO-US0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 08-SEP-1999; 99US-0146222P.
 PR 13-SEP-1999; 99WO-US020594.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 29-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 30-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.
 PA (GETH) GENENTECH INC.
 XX
 PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX
 DR WPI; 2003-801268/75.
 XX
 PT Novel isolated native PRO polypeptide useful for tissue typing,
 PT modulating biological activity of cell, as molecular weight markers in
 PT protein electrophoresis, for treating enterocolitis, Zollinger-Ellison
 PT syndrome.
 XX
 PS Example 36; SEQ ID NO 229; 472pp; English.
 XX
 CC The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 CC -differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypopinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or

CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGCTCTCAGGGGAG 1116
 Db ||||| ||||| ||||| |||||
 3 GCTGCTCACAGGGGAG 18
 RESULT 1930
 ADD44211
 ID ADD44211 standard; DNA; 18 BP.
 XX
 AC ADD44211;
 DT 15-JAN-2004 (first entry)
 XX
 DE Carboxypeptidase G2 (CPG2) enzyme mutagenic oligonucleotide O1576.
 XX
 KW bacterial enzyme; carboxypeptidase G2; CPG2; non-immunogenic;
 KW immunogenic; T-cell epitope; MHC class II binding ligand;
 KW immunostimulant; enzyme therapy; immune response;
 KW gene directed enzyme prodnug strategy; vaccine; enzyme; EC 3.4.17.11;
 KW mutagenic; ss.
 XX
 OS Synthetic.
 OS Pseudomonas sp. RS-16.
 XX
 PN WC2003045426-A1.
 XX
 PD 05-JUN-2003.
 XX
 PF 27-NOV-2002; 2002WO-EP013351.
 XX
 PR 29-NOV-2001; 2001EP-00128519.
 PR 25-JAN-2002; 2002EP-00001778.
 PR 13-SEP-2002; 2002EP-00020634.
 XX
 PA (MERE) MERCK PATENT GMBH.
 XX
 PI Hellendoorn K, Baker M, Williams S, Carr FJ;
 DR WPI; 2003-513617/48.
 XX
 PT New modified bacterial enzyme carboxypeptidase G2 (CPG2) having
 PT substantially non-immunogenic or less immunogenic than any non-modified
 PT CPG2, useful for inducing an immune response in a human host.
 XX

| | | | |
|-------------|---|-------------|---|
| PS | Example 4; Page 37; 52pp; English. | CC | The invention relates to a novel modified bacterial enzyme |
| XX | | CC | carboxypeptidase G2 (CPG2). The modified enzyme can result in CPG2 |
| CC | | CC | proteins that are substantially non-immunogenic or less immunogenic than |
| CC | | CC | any non-modified CPG2 having essentially the same biological specificity |
| CC | | CC | when used in vivo, and comprising specific amino acid residues having |
| CC | | CC | alterations compared with the non-modified parochial enzyme. The |
| CC | | CC | alterations cause a reduction or an elimination of one or more of T-cell |
| CC | | CC | epitope sequences, which act in the parental enzyme as MHC class II |
| CC | | CC | binding ligands and stimulate T-cells. The modified CPG2 enzyme and the |
| CC | | CC | CPG2 proteins have immunostimulant activity and may be used in enzyme |
| CC | | CC | therapy. The modified CPG2 enzyme may be used to induce an immune |
| CC | | CC | response in a human host, or as a therapeutic entity such as the gene |
| CC | | CC | directed enzyme produg strategy. The peptide is useful for the |
| CC | | CC | manufacture of a modified CPG2 enzyme having substantially no or less |
| CC | | CC | immunogenicity than any non-modified parental enzyme when used in vivo, |
| CC | | CC | and for vaccination of patients to reduce immunogenicity to CPG2 in vivo. |
| CC | | CC | This polynucleotide sequence represents a mutagenic oligonucleotide used |
| CC | | CC | in the production of a modified CPG2 gene of the invention. |
| XX | | XX | Sequence 18 BP; 9 A; 2 C; 4 G; 3 T; 0 U; 0 Other; |
| SQ | | SQ | Query Match 0.4%; Score 14.4; DB 1; Length 18; |
| | | | Best Local Similarity 93.8%; Pred. No. 1.7e+03; |
| | | | Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0; |
| QY | 1295 TGAAGATGCTGAAAGA 1310 | QY | 1295 TGAAGATGCTGAAAGA 1310 |
| DB | 2 TGAAGATGCTGAAAGA 17 | DB | 17 TGAAGATGCTGAAAGA 2 |
| RESULT 1931 | | RESULT 1932 | |
| ADD44227/c | | ADE34862 | |
| ID | ADD44227 standard; DNA; 18 BP. | ID | ADE34862 standard; DNA; 18 BP. |
| XX | | XX | |
| AC | ADD44227; | AC | ADE34862; |
| XX | | XX | |
| DT | 15-JAN-2004 (first entry) | DT | 29-JAN-2004 (first entry) |
| XX | | XX | |
| DE | Carboxypeptidase G2 (CPG2) enzyme mutagenic oligonucleotide OL592. | XX | Human secreted/transmembrane protein, #44, PCR primer #2. |
| XX | | KW | Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic; |
| KW | bacterial enzyme; carboxypeptidase G2; CPG2; non-immunogenic; | KW | tissue typing; immunohistochemical staining; gene therapy; |
| KW | immunogenic; T-cell epitope; MHC class II binding ligand; | KW | neonatal heart; vascular endothelial growth factor; VEGF; proliferation; |
| KW | immunostimulant; enzyme therapy; immune response; | KW | endothelial cell; stimulated T-lymphocyte; retinal neuron; |
| KW | gene directed enzyme produg strategy; vaccine; enzyme; EC 3.4.17.11; | KW | rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte; |
| KW | mutagenic; ss. | KW | cardiac insufficiency disorder; wound; cancer; tumor; retinal disorder; |
| XX | | KW | retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia; |
| OS | Synthetic. | KW | hypoinsulinaemia; bone disorder; cartilage disorder; sport injury; |
| OS | Pseudomonas sp. RS-16. | KW | arthritis; cardiac; vulnary; cytostatic; ophthalmological; |
| XX | | XX | osteopathic; antiarthritic; anorectic. |
| PN | WO2003045426-A1. | OS | Homo sapiens. |
| XX | | XX | |
| PD | 05-JUN-2003. | XX | US2003077583-A1. |
| XX | | XX | |
| PF | 27-NOV-2002; 2002WO-EP013351. | PD | 24-APR-2003. |
| XX | | XX | |
| PR | 29-NOV-2001; 2001EP-00128519. | PF | 13-JUL-2001; 2001US-00905075. |
| PR | 25-JAN-2002; 2002EP-00001778. | XX | |
| XX | | PR | 17-SEP-1997; 97US-0059113P. |
| PR | 13-SEP-2002; 2002EP-00020634. | PR | 17-SEP-1997; 97US-0059115P. |
| XX | | PR | 17-SEP-1997; 97US-0059117P. |
| PA | (MERE) MERCK PATENT GMBH. | PR | 17-SEP-1997; 97US-0059119P. |
| XX | | PR | 17-SEP-1997; 97US-0059121P. |
| PI | Hellendoorn K, Baker M, Williams S, Carr FJ; | PR | 17-SEP-1997; 97US-0059122P. |
| XX | | PR | 17-SEP-1997; 97US-0059184P. |
| DR | WPI; 2003-513617/48. | PR | 18-SEP-1997; 97US-0059263P. |
| XX | | PR | 18-SEP-1997; 97US-0059266P. |
| PT | New modified bacterial enzyme carboxypeptidase G2 (CPG2) having | PR | 15-OCT-1997; 97US-0062125P. |
| PT | substantially non-immunogenic or less immunogenic than any non-modified | PR | 17-OCT-1997; 97US-0062285P. |
| XX | CPG2, useful for inducing an immune response in a human host. | PR | 17-OCT-1997; 97US-0062287P. |
| PS | Example 4; Page 37; 52pp; English. | PR | 21-OCT-1997; 97US-0063486P. |
| XX | | PR | 24-OCT-1997; 97US-0062814P. |

PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064448P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 26-NOV-1997; 97US-0066480P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-008026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 14-SEP-1998; 98US-0100262P.
 PR 14-SEP-1998; 98US-0100262P.
 PR 16-SEP-1998; 98US-0100262P.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98US-01019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98US-0109304P.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99US-0146222P.
 PR 13-SEP-1999; 99US-0146222P.
 PR 15-SEP-1999; 99US-0146222P.
 PR 15-SEP-1999; 99US-0146222P.
 PR 05-OCT-1999; 99US-0146222P.
 PR 29-NOV-1999; 99US-0146222P.
 PR 30-NOV-1999; 99US-0146222P.
 PR 01-DEC-1999; 99US-0146222P.
 PR 02-DEC-1999; 99US-0146222P.
 PR 02-DEC-1999; 99US-0146222P.
 PR 16-DEC-1999; 99US-0146222P.
 PR 20-DEC-1999; 99US-0146222P.
 PR 20-DEC-1999; 99US-0146222P.
 PR 05-JAN-2000; 2000US-0000219P.
 PR 11-FEB-2000; 2000US-0003565P.
 PR 22-FEB-2000; 2000US-0004414P.
 PR 22-FEB-2000; 2000US-0005004P.
 PR 02-MAR-2000; 2000US-0005841P.
 PR 20-MAR-2000; 2000US-0007377P.
 PR 30-MAR-2000; 2000US-0008439P.
 PR 22-MAY-2000; 2000US-0014042P.

PR 02-JUN-2000; 2000US-0015264P.
 PR 28-JUL-2000; 2000US-0020710P.
 PR 24-AUG-2000; 2000US-0023328P.
 PR 18-SEP-2000; 2000US-00665350.
 XX (GETH) GENENTECH INC.
 XX Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kijavini J;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2003-777194/73.
 XX New isolated PRO polypeptides e.g. PRO245 and PRO1868, useful for
 PT treating e.g. Parkinson's disease, Alzheimer's disease, amyotrophic
 PT lateral sclerosis, cancer, neuropathies, diabetes and psoriasis.
 PT
 XX Example 36; SEQ ID NO 229; 474pp; English.
 PS
 XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 CC differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypotension, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGCTCTCAGGGAG 1116
 ||||| |||||

PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 02-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.
 XX
 PA (GETH) GENENTECH INC.
 XX
 PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
 PI Mather JP, Pan J, Paoi NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2003-695899/66.
 DR
 XX
 XX Novel isolated native PRO polypeptide useful for treating Parkinson's
 PT disease, enterocolitis, Zollinger-Ellison syndrome gastrointestinal
 PT ulceration, Alzheimer's disease, amyotrophic lateral sclerosis, Usher
 PT syndrome.
 XX
 PS Example 36; SEQ ID NO 229; 471pp; English.
 XX
 CC The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 CC differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypotension, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis

CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCTCTCAGGGGAG 1116
 Db 3 GCTGTCTCAGGGGAG 18
 RESULT 1935
 ACA59084
 ID ACA59084 standard; DNA; 18 BP.
 XX
 AC ACA59084;
 XX
 DT 16-JUN-2003 (first entry)
 XX
 DE Human PRO PCR primer #96.
 XX
 KW Human; PRO; primer; ss; secreted polypeptide; transmembrane polypeptide;
 KW pathological disorder; cardiac insufficiency disorder; protein secretion;
 KW pancreas; diabetes; gastrointestinal mucosa; mucosal lesion; psoriasis;
 KW skin disease; keratinocyte differentiation; epithelial cancer; tumour;
 KW lung squamous cell carcinoma; epidermoid carcinoma; vulva; glioma; PCR;
 KW cytostatic; cardiant; endocrine; antidiabetic; gastrointestinal;
 KW antiulcer; dermatological; vulnary.
 XX
 OS Homo sapiens.
 XX
 PN US2002146709-A1.
 XX
 PD 10-OCT-2002.
 XX
 PF 18-JUL-2001; 2001US-00909088.
 XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 27-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.

28-OCT-1997; 97US-0063544P.
 28-OCT-1997; 97US-0063549P.
 28-OCT-1997; 97US-0063550P.
 28-OCT-1997; 97US-0063564P.
 28-OCT-1997; 97US-0063435P.
 28-OCT-1997; 97US-0063704P.
 28-OCT-1997; 97US-0063732P.
 28-OCT-1997; 97US-0063734P.
 28-OCT-1997; 97US-0063735P.
 28-OCT-1997; 97US-0063738P.
 28-OCT-1997; 97US-0064215P.
 28-OCT-1997; 97US-0063870P.
 28-OCT-1997; 97US-0064103P.
 03-NOV-1997; 97US-0064248P.
 07-NOV-1997; 97US-0064809P.
 12-NOV-1997; 97US-0065186P.
 17-NOV-1997; 97US-0065846P.
 18-NOV-1997; 97US-0065893P.
 21-NOV-1997; 97US-0066120P.
 21-NOV-1997; 97US-0066364P.
 24-NOV-1997; 97US-0066453P.
 24-NOV-1997; 97US-0066466P.
 24-NOV-1997; 97US-0066511P.
 24-NOV-1997; 97US-0066770P.
 24-NOV-1997; 97US-0066772P.
 24-NOV-1997; 97US-0066772P.
 10-SEP-1998; 98WO-US018824.
 14-SEP-1998; 98WO-US019177.
 16-SEP-1998; 98WO-US019330.
 17-SEP-1998; 98WO-US019437.
 01-DEC-1998; 98WO-US025108.
 08-SEP-1999; 99WO-US020594.
 13-SEP-1999; 99WO-US020944.
 15-SEP-1999; 99WO-US021090.
 15-SEP-1999; 99WO-US021547.
 05-OCT-1999; 99WO-US023089.
 29-NOV-1999; 99WO-US028214.
 30-NOV-1999; 99WO-US028313.
 01-DEC-1999; 99WO-US028301.
 02-DEC-1999; 99WO-US028564.
 02-DEC-1999; 99WO-US028565.
 16-DEC-1999; 99WO-US030095.
 20-DEC-1999; 99WO-US030911.
 20-DEC-1999; 99WO-US030999.
 05-JAN-2000; 2000WO-US000219.
 11-FEB-2000; 2000WO-US003565.
 22-FEB-2000; 2000WO-US004414.
 24-FEB-2000; 2000WO-US005004.
 02-MAR-2000; 2000WO-US005841.
 20-MAR-2000; 2000WO-US007377.
 30-MAR-2000; 2000WO-US008439.
 22-MAY-2000; 2000WO-US014042.
 02-JUN-2000; 2000WO-US015264.
 28-JUL-2000; 2000WO-US020710.
 24-AUG-2000; 2000WO-US023328.
 18-SEP-2000; 2000US-00665350.
 (GETH) GENENTECH INC.
 Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
 Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 Williams PM, Wood WI;
 WPI; 2003-328338/31.
 Isolated nucleic acid useful for e.g., treating pathological disorders
 encodes a secreted or transmembrane protein.
 Example 37; Page 102; 473pp; English.
 The invention relates to human PRO polypeptides (secreted or
 transmembrane polypeptides) and the polynucleotides encoding them. The

CC PRO polypeptides and polynucleotides can be used in treating pathological
 CC disorders and tumours, in therapeutic treatment of cardiac insufficiency
 CC disorders and in therapeutic treatment of disorders involving protein
 CC secretion by the pancreas, including diabetes. They can also be used in
 CC treating disorders associated with the preservation and maintenance of
 CC gastrointestinal mucosa and the repair of acute and chronic mucosal
 CC lesions, and skin diseases associated with abnormal keratinocyte
 CC differentiation (e.g., psoriasis, epithelial cancers such as lung
 CC squamous cell carcinoma, epidermoid carcinoma of the vulva and gliomas).
 CC The sequences can be used as molecular markers for protein
 CC electrophoresis purposes and can be utilised in protein-protein binding
 CC assays, biochemical screening assays, immunassays and cell-based assays.
 CC This sequence represents a PCR primer used to isolate a human PRO
 CC polynucleotide of the invention
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCCTCAGGGGAG 1116
 |||||
 Db 3 GCTGTCACAGGGGAG 18
 |||||
 RESULT 1936
 ACA58481
 ID ACA58481 standard; DNA; 18 BP.
 XX
 AC ACA58481;
 XX
 DT 10-JUN-2003 (first entry)
 XX
 DE PCR primer #106 used to isolate cDNA encoding a human PRO polypeptide.
 KW Human; secreted and transmembrane protein; PRO polypeptide; cancer;
 KW Alzheimer's disease; ischaemia; cytostatic; neurotropic; vasotropic;
 KW neuroprotective; PCR; primer; ss.
 XX Homo sapiens.
 XX
 PN US2002192659-A1.
 XX
 PD 19-DEC-2002.
 XX
 PF 10-JUL-2001; 2001US-00902853.
 XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.

XX AC ADE79307;
XX AC 29-JAN-2004 (first entry)
XX DT
XX DE Human secreted/transmembrane protein, #44, PCR primer #2.
XX DE
XX KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
KW hypotension; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiac; vulnary; cytosatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX KW
XX OS Homo sapiens.
XX PN US2003135025-A1.
XX PN
XX PD 17-JUL-2003.
XX PF
XX PF 12-JUL-2001; 2001US-00904992.
XX PR 17-SEP-1997; 97US-0059113P.
XX PR 17-SEP-1997; 97US-0059115P.
XX PR 17-SEP-1997; 97US-0059117P.
XX PR 17-SEP-1997; 97US-0059119P.
XX PR 17-SEP-1997; 97US-0059121P.
XX PR 17-SEP-1997; 97US-0059122P.
XX PR 17-SEP-1997; 97US-0059184P.
XX PR 18-SEP-1997; 97US-0059263P.
XX PR 18-SEP-1997; 97US-0059266P.
XX PR 15-OCT-1997; 97US-0062125P.
XX PR 17-OCT-1997; 97US-0062285P.
XX PR 17-OCT-1997; 97US-0062287P.
XX PR 21-OCT-1997; 97US-0063486P.
XX PR 24-OCT-1997; 97US-0063121P.
XX PR 24-OCT-1997; 97US-0063127P.
XX PR 24-OCT-1997; 97US-0063128P.
XX PR 24-OCT-1997; 97US-0063327P.
XX PR 27-OCT-1997; 97US-0063329P.
XX PR 28-OCT-1997; 97US-0063541P.
XX PR 28-OCT-1997; 97US-0063542P.
XX PR 28-OCT-1997; 97US-0063544P.
XX PR 28-OCT-1997; 97US-0063549P.
XX PR 28-OCT-1997; 97US-0063550P.
XX PR 28-OCT-1997; 97US-0063564P.
XX PR 29-OCT-1997; 97US-0063435P.
XX PR 29-OCT-1997; 97US-0063704P.
XX PR 29-OCT-1997; 97US-0063732P.
XX PR 29-OCT-1997; 97US-0063734P.
XX PR 29-OCT-1997; 97US-0063735P.
XX PR 29-OCT-1997; 97US-0063738P.
XX PR 29-OCT-1997; 97US-0064215P.
XX PR 31-OCT-1997; 97US-0063870P.
XX PR 31-OCT-1997; 97US-0064103P.
XX PR 03-NOV-1997; 97US-0064248P.
XX PR 07-NOV-1997; 97US-0064809P.
XX PR 12-NOV-1997; 97US-0065186P.
XX PR 17-NOV-1997; 97US-0065846P.
XX PR 18-NOV-1997; 97US-0065693P.
XX PR 21-NOV-1997; 97US-0066120P.
XX PR 21-NOV-1997; 97US-0066364P.
XX PR 24-NOV-1997; 97US-0066453P.
XX PR 24-NOV-1997; 97US-0066466P.
XX PR 24-NOV-1997; 97US-0066511P.

PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 30-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.

(GETH) GENENTECH INC.

PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NP, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX WPI; 2004-031331/03.

XX New nucleic acid encoding a PRO polypeptide, for producing a recombinant
PT PRO polypeptide and for treating e.g. cancer, infertility, kidney
PT disorders, and cardiac disfunctions.

XX Example 36; SEQ ID NO 229; 473pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated

CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re-
 CC -differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypotension, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.

XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCTCTCAGGGGAG 1116
 |||||
 Db 3 GCTGTCTCAGGGGAG 18

RESULT 1939

AD579731

ID ADE79731 standard; DNA; 18 BP.

XX

AC ADE79731;

XX

DT 29-JAN-2004 (first entry)

XX

DE Human secreted/transmembrane protein, #44, PCR primer #2.

XX

KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;

XX

KW tissue typing; immunohistochemical staining; gene therapy;

XX

KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;

XX

KW endothelial cell; stimulated T-lymphocyte; retinal neuron;

XX

KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;

XX

KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;

XX

KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;

XX

KW hypotension; bone disorder; cartilage disorder; sport injury;

XX

KW arthritis; cardiac; vulnery; cyclostatic; ophthalmological;

XX

KW osteopathic; antiarthritic; anorectic.

XX

OS Homo sapiens.

XX

PN US2003130489-A1.

XX

PD 10-JUL-2003.

XX

PF 11-JUL-2001; 2001US-00903806.

XX

XX 17-SEP-1997; 97US-0059113P.

PR

PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 24-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 14-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.

PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 05-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-0065350.
 XX

(GETH) GENENTECH INC.

PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin J;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX

DR WPI; 2004-020353/02.

XX New PRO nucleic acid, useful for manufacturing a medicament for
 PT diagnosing or treating tumor or for tissue typing.
 XX

PS Example 36; SEQ ID NO 229; 480pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioreactors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 CC -differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypotension, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The

CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. NO. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCTTCAGGGGAG 1116
 Db 3 GCTGTCCACAGGGGAG 18
 RESULT 1940
 ADE73407
 ID ADE73407 standard; DNA; 18 BP.
 XX
 AC ADE73407;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Human secreted/transmembrane protein, #44, PCR primer #2.
 XX
 KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypotension; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiac; vulnary; cytostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.
 XX
 OS Homo sapiens.
 XX
 PN US2003129592-A1.
 PD 10-JUL-2003.
 XX
 PF 13-JUL-2001; 2001US-00905449.
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059268P.
 PR 15-OCT-1997; 97US-0062123P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.

PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065893P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 24-NOV-1997; 97US-0066777P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 14-SEP-1998; 98US-01001824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 16-SEP-1998; 98US-01019177.
 PR 17-SEP-1998; 98US-01019330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98US-01019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98US-00205108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99US-0020594.
 PR 13-SEP-1999; 99US-0020594.
 PR 15-SEP-1999; 99US-0021090.
 PR 15-SEP-1999; 99US-0021547.
 PR 05-OCT-1999; 99US-0023089.
 PR 29-NOV-1999; 99US-0028214.
 PR 30-NOV-1999; 99US-0028213.
 PR 01-DEC-1999; 99US-0020944.
 PR 02-DEC-1999; 99US-0028564.
 PR 02-DEC-1999; 99US-0028565.
 PR 16-DEC-1999; 99US-0030095.
 PR 20-DEC-1999; 99US-0030911.
 PR 20-DEC-1999; 99US-0030999.
 PR 05-JAN-2000; 2000US-0000219.
 PR 11-FEB-2000; 2000US-0003565.
 PR 22-FEB-2000; 2000US-0004414.
 PR 24-FEB-2000; 2000US-0005004.
 PR 02-MAR-2000; 2000US-0005841.
 PR 20-MAR-2000; 2000US-0007377.
 PR 30-MAR-2000; 2000US-0008439.
 PR 22-MAY-2000; 2000US-0014042.
 PR 02-JUN-2000; 2000US-0015264.
 PR 28-JUL-2000; 2000US-0020710.
 PR 24-AUG-2000; 2000US-0023328.
 PR 18-SEP-2000; 2000US-00665350.
 PA (GETH) GENENTECH INC.
 XX
 XX
 PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX
 XX WPI; 2004-020333/02.
 DR
 XX

PT New nucleic acids encoding polypeptides designated PRO have sequence
 PT identity to various secreted proteins and transmembrane proteins and are
 XX useful in molecular techniques and as therapeutic agents.
 PS Example 36; SEQ ID NO 229; 474pp; English.
 XX
 CC The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 CC differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypotension, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCTCTCAGGGGAG 1116
 Db 3 GCTGTCTCAGGGGAG 18
 |||||
 |||||
 RESULT 1941
 ADE73942
 ID ADE73942 standard; DNA; 18 BP.
 XX
 AC ADE73942;
 DT 29-JAN-2004 (first entry)
 XX Human secreted/transmembrane protein, #44, PCR primer #2.
 DE
 XX Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;

CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.

XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCCTCAGGGGAG 1116
 |||||
 Db 3 GCTGTCACAGGGGAG 18

RESULT 1942
 ADE99496
 ID ADE99496 standard; DNA; 18 BP.

XX AC ADE99496;
 XX
 DT 12-FEB-2004 (first entry)
 XX
 DE Human secreted/transmembrane protein, #44, PCR primer #2.
 KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; PFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypotinsulinaemia; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiant; vulnerary; cyostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.

XX Homo sapiens.

OS US2003211576-A1.

XX 13-NOV-2003.

XX 18-NOV-2002; 2002US-00298993.

XX 22-FEB-2000; 2000WO-US004414.

PR 18-SEP-2000; 2000US-00665350.

XX (GETH) GENENTECH INC.

XX Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen KE, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IU;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;

XX WPI; 2004-021580/02.

DR
 XX
 PT New PRO polypeptide for preparing a medicament for treating a condition
 PT that is responsive to the PRO polypeptide or anti-PRO antibody, e.g.
 PT inflammatory diseases, cancer or acquired immunodeficiency syndrome.

XX Example 36; SEQ ID NO 229; 476pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or PFA uptake, inducing proliferation and/or re-
 CC -differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypotinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCCTCAGGGGAG 1116
 |||||
 Db 3 GCTGTCACAGGGGAG 18

RESULT 1943

ADE98615

ID ADE98615 standard; DNA; 18 BP.

XX AC ADE98615;

XX DT 12-FEB-2004 (first entry)

XX Human secreted/transmembrane protein, #44, PCR primer #2.

XX Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumor; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypotension; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiac; vulnary; cytosolic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.
 XX
 OS Homo sapiens.
 XX
 PN US2003211569-A1.
 XX
 PD 13-NOV-2003.
 XX
 PF 12-JUL-2001; 2001US-00904938.
 XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063341P.
 PR 28-OCT-1997; 97US-0063342P.
 PR 28-OCT-1997; 97US-0063344P.
 PR 28-OCT-1997; 97US-0063349P.
 PR 28-OCT-1997; 97US-0063350P.
 PR 28-OCT-1997; 97US-0063356P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.

PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019310.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.

(GETH) GENENTECH INC.

PA Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kijavini IJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2004-021576/02.

XX New isolated native PRO polypeptide useful for treating Parkinson's
 PT disease, enterocolitis, Zollinger-Ellison syndrome gastrointestinal
 PT ulceration, Alzheimer's disease, amyotrophic lateral sclerosis, or Usher
 PT syndrome.

XX Example 36; SEQ ID NO 229; 469pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 CC differentiation of chondrocytes. In particular, these are useful for

CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypoparathyroidism, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome electrophoresis.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCTCTCAGGGGAG 1116
 Db 3 GCTGTCTCAGGGGAG 18

RESULT 1944

AD999042
 ID ADE99042 standard; DNA; 18 BP.

XX ADE99042;

XX 12-FEB-2004 (first entry)

DE Human secreted/transmembrane protein, #44, PCR primer #2.

XX Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypoparathyroidism; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiant; vulnary; cyostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.

XX Homo sapiens.

XX US2003211568-A1.

XX 13-NOV-2003.

XX 12-JUL-2001; 2001US-00904805.

XX 27-OCT-1997; 97US-0063327P.

XX 16-SEP-1998; 98WO-US019130.

XX 22-FEB-2000; 2000WO-US004414.

XX 18-SEP-2000; 2000US-00665350.

XX (GETH) GENENTECH INC.

XX Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Geritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin LJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2004-021575/02.

XX New secreted and transmembrane nucleic acids and polypeptides, designated
 PT as PRO, useful for treating inflammation, organ failure, atherosclerosis,
 PT cardiac injury, infertility, birth defects, premature aging, AIDS, or
 PT cancer.

XX Example 36; SEQ ID NO 229; 473pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 CC -differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypoparathyroidism, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome electrophoresis.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 1.7e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCTCTCAGGGGAG 1116

Db 3 GCTGTCTCAGGGGAG 18

RESULT 1945

ADG40512

ADG40512 standard; DNA; 18 BP.
ADG40512;
26-FEB-2004 (first entry)
Human secreted/transmembrane protein, #44, PCR primer #2.
Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
tissue typing; immunohistochemical staining; gene therapy;
neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
endothelial cell; stimulated T-lymphocyte; retinal neuron;
rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
arthritis; cardiant; vulnary; cytostatic; ophthalmological;
osteopathic; antiarthritic; anorectic.
Homo sapiens.
US2003225253-A1.
04-DEC-2003.
29-MAY-2003; 2003US-00448923.
24-OCT-1997; 97US-0063128P.
16-SEP-1998; 98WO-US019330.
30-NOV-1999; 99WO-US028313.
22-FEB-2000; 2000WO-US004414.
18-SEP-2000; 2000US-0065350.
12-JUL-2001; 2001US-00905125.
(DESN/) DESNOYERS L.
(GODD/) GODDARD A.
(GODO/) GODOWSKI P J.
(GURN/) GURNEY A L.
(MATH/) MATHER J P.
(WILL/) WILLIAMS P M.
(WOOD/) WOOD W I.
Desnoyers L, Goddard A, Godowski PJ, Gurney AL, Mather JP;
Williams PM, Wood WI;
WPI; 2004-022084/02.
New PRO nucleic acid, useful for manufacturing a medicament for
diagnosing or treating tumor, for chromosome mapping or for tissue
typing.
Example 36; SEQ ID NO 229; 463pp; English.
The invention discloses isolated PRO secreted/transmembrane polypeptides
and the nucleic acid encoding them. The polypeptides can be used to raise
antibodies that specifically bind to the PRO polypeptide, for linking a
bioactive molecule to a cell expressing a PRO protein and for modulating
at least one biological activity of a cell. PRO polypeptides are useful
for detecting other PRO polypeptides in a sample and for linking a
bioactive molecule to a cell expressing a PRO polypeptide. The PRO
polypeptide antibodies are useful for modulating the biological activity
of a cell expressing PRO polypeptides. The PRO polypeptides or
polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
bioreactors. These are useful for stimulating hypertrophy of neonatal
heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
proliferation of endothelial cells, modulating the proliferation of
stimulated T-lymphocytes, enhancing the survival or proliferation of
retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
cells, modulating glucose or FFA uptake, inducing proliferation and/or re-
differentiation of chondrocytes. In particular, these are useful for
detecting or treating cardiac insufficiency disorders, wounds, cancerous
tumours, retinal disorders or injuries (e.g. loss of sight due to
retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,

CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
arthritis) in mammals. PRO polypeptides and their portions affect the
expression of genes which have a role in cell death. The polynucleotides
are useful in molecular biology including uses as hybridisation probes
for cDNA library to isolate the full-length PRO cDNA or to isolate other
cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
and DNA, for preparing PRO polypeptides, for generating transgenic
animals or knockout animals which are useful in the development and
screening of therapeutically useful reagents, as probes and for the
genetic analysis of individuals with genetic disorders as well as for
recombinantly expressing the protein and for chromosome identification.
The proteins are useful as molecular marker for protein electrophoresis
purposes, as therapeutic agents, for screening compounds to identify
those that mimic the PRO polypeptide (agonists) or prevent the effect of
the PRO polypeptide (antagonists). The polynucleotides and proteins are
useful for tissue typing. PRO antibodies are useful for
immunohistochemical staining and/or assay of sample fluids. Anti-PRO
antibodies are useful in diagnostic assays for PRO e.g. detecting its
expression in specific cells, tissues or serum and for affinity
purification of PRO from recombinant cell culture or natural sources. The
PRO genes may also be used in gene therapy, particularly for replacing a
defective gene. The sequence presented is a PCR primer which was used to
amplify a PRO polynucleotide of the invention.
XX
SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1101 GCTGTCTCTCAGGGGAG 1116
||||| |||||||
Db 3 GCTGTCTCAGGGGAG 18
RESULT 1946
ADP73906
ID ADF73906 standard; DNA; 18 BP.
XX
AC ADF73906;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human secreted/transmembrane protein, #44, PCR primer #2.
XX
KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
OS Homo sapiens.
XX
PN US2003225253-A1.
XX
PD 04-DEC-2003.
XX
PF 29-MAY-2003; 2003US-00448923.
XX
PR 24-OCT-1997; 97US-0063128P.
PR 16-SEP-1998; 98WO-US019330.
PR 30-NOV-1999; 99WO-US028313.
PR 22-FEB-2000; 2000WO-US004414.
PR 18-SEP-2000; 2000US-0065350.
PR 12-JUL-2001; 2001US-00905125.
XX
PA (DESN/) DESNOYERS L.
PA (GODD/) GODDARD A.
PA (GODO/) GODOWSKI P J.
PA (GURN/) GURNEY A L.
PA (MATH/) MATHER J P.
PA (WILL/) WILLIAMS P M.
PA (WOOD/) WOOD W I.
XX
PI Desnoyers L, Goddard A, Godowski PJ, Gurney AL, Mather JP;
PI Williams PM, Wood WI;
XX
DR WPI; 2004-022084/02.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor, for chromosome mapping or for tissue
PT typing.
XX
PS Example 36; SEQ ID NO 229; 463pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re-
CC differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,

PI Williams PM, Wood WI;
XX WPI; 2004-031838/03.
XX New PRO polypeptide useful for preparing a medicament for treating a
PT condition that is responsive to the PRO polypeptide or anti-PRO antibody,
PT e.g. inflammatory diseases, cancer or acquired immunodeficiency syndrome.
XX Example 36; SEQ ID NO 229; 473pp; English.
XX The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptide can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
CC hypotension, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a PCR primer which was used to
XX amplify a PRO polynucleotide of the invention.
SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.48; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1101 GCTGTCTCTCAGGGGAG 1116
||||| |||||
Db 3 GCTGTCTCAGGGGAG 18
RESULT 1947
ADF73482
ID ADF73482 standard; DNA; 18 BP.
XX ADF73482;
AC ADF73482;
XX 26-FEB-2004 (first entry)
DT
XX

DE Human secreted/transmembrane protein, #44, PCR primer #2.
XX
XX Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
KW hypotension; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiac; vulnary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
XX Homo sapiens.
OS
XX US2003166051-A1.
XX
XX 04-SEP-2003.
XX
XX 13-JUL-2001; 2001US-00904920.
XX
XX 17-SEP-1997; 97US-0059113P.
XX 17-SEP-1997; 97US-0059115P.
XX 17-SEP-1997; 97US-0059117P.
XX 17-SEP-1997; 97US-0059119P.
XX 17-SEP-1997; 97US-0059122P.
XX 17-SEP-1997; 97US-0059121P.
XX 17-SEP-1997; 97US-0059184P.
XX 18-SEP-1997; 97US-0059263P.
XX 18-SEP-1997; 97US-0059266P.
XX 15-OCT-1997; 97US-0062125P.
XX 17-OCT-1997; 97US-0062285P.
XX 17-OCT-1997; 97US-0062287P.
XX 21-OCT-1997; 97US-0063486P.
XX 24-OCT-1997; 97US-0062814P.
XX 24-OCT-1997; 97US-0062816P.
XX 24-OCT-1997; 97US-0063045P.
XX 24-OCT-1997; 97US-0063120P.
XX 24-OCT-1997; 97US-0063121P.
XX 24-OCT-1997; 97US-0063127P.
XX 24-OCT-1997; 97US-0063128P.
XX 27-OCT-1997; 97US-0063327P.
XX 27-OCT-1997; 97US-0063329P.
XX 28-OCT-1997; 97US-0063541P.
XX 28-OCT-1997; 97US-0063542P.
XX 28-OCT-1997; 97US-0063544P.
XX 28-OCT-1997; 97US-0063549P.
XX 28-OCT-1997; 97US-0063550P.
XX 28-OCT-1997; 97US-0063564P.
XX 29-OCT-1997; 97US-0063435P.
XX 29-OCT-1997; 97US-0063704P.
XX 29-OCT-1997; 97US-0063732P.
XX 29-OCT-1997; 97US-0063734P.
XX 29-OCT-1997; 97US-0063735P.
XX 29-OCT-1997; 97US-0063738P.
XX 29-OCT-1997; 97US-0064215P.
XX 31-OCT-1997; 97US-0063870P.
XX 31-OCT-1997; 97US-0064103P.
XX 03-NOV-1997; 97US-0064248P.
XX 07-NOV-1997; 97US-0064809P.
XX 12-NOV-1997; 97US-0065186P.
XX 17-NOV-1997; 97US-0065846P.
XX 18-NOV-1997; 97US-0065693P.
XX 21-NOV-1997; 97US-0066120P.
XX 21-NOV-1997; 97US-0066364P.
XX 24-NOV-1997; 97US-0066453P.
XX 24-NOV-1997; 97US-0066466P.
XX 24-NOV-1997; 97US-0066770P.
XX 24-NOV-1997; 97US-0066772P.
XX 25-NOV-1997; 97US-0066840P.
XX 12-DEC-1997; 97US-0069425P.
XX 04-JUN-1998; 98US-0088026P.
XX 10-SEP-1998; 98US-0099803P.

10-SEP-1998; 98WO-US018824.
 14-SEP-1998; 98US-0100262P.
 14-SEP-1998; 98WO-US013177.
 16-SEP-1998; 98WO-US013330.
 17-SEP-1998; 98US-0100858P.
 17-SEP-1998; 98WO-US019437.
 18-SEP-1998; 98US-0101080P.
 18-SEP-1998; 98WO-US010930P.
 01-DEC-1998; 98WO-US025108.
 22-DEC-1998; 98US-0113296P.
 27-JUL-1999; 99US-0143048P.
 28-JUL-1999; 99US-0145698P.
 28-JUL-1999; 99US-0146222P.
 08-SEP-1999; 99WO-US020594.
 13-SEP-1999; 99WO-US020944.
 15-SEP-1999; 99WO-US021090.
 15-SEP-1999; 99WO-US021547.
 05-OCT-1999; 99WO-US023089.
 29-NOV-1999; 99WO-US028214.
 30-NOV-1999; 99WO-US028313.
 01-DEC-1999; 99WO-US028301.
 02-DEC-1999; 99WO-US028564.
 02-DEC-1999; 99WO-US028565.
 16-DEC-1999; 99WO-US030095.
 20-DEC-1999; 99WO-US030911.
 20-DEC-1999; 99WO-US030999.
 05-JAN-2000; 2000WO-US000219.
 11-FEB-2000; 2000WO-US003565.
 22-FEB-2000; 2000WO-US004414.
 24-FEB-2000; 2000WO-US005004.
 02-MAR-2000; 2000WO-US005841.
 02-MAR-2000; 2000WO-US007377.
 30-MAR-2000; 2000WO-US008439.
 22-MAY-2000; 2000WO-US014042.
 02-JUN-2000; 2000WO-US015264.
 28-JUL-2000; 2000WO-US020710.
 24-AUG-2000; 2000WO-US023328.
 18-SEP-2000; 2000US-00665350.
 (GETH) GENENTECH INC.
 Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
 Mather JP, Pan J, Raoni NF, Roy MA, Stewart TA, Tumas D;
 William PM, Wood WI;
 WPI; 2004-020549/02.
 New secreted and transmembrane PRO polypeptides and nucleic acids, useful
 in gene therapy, in chromosome and gene mapping, as chromosome markers,
 in tissue typing, in identifying chromosomes, and for treating e.g. tumor
 or arthritis.
 Example 36; SEQ ID NO 229; 478bp; English.
 The invention discloses isolated PRO secreted/transmembrane polypeptides
 and the nucleic acids encoding them. The polypeptides can be used to raise
 antibodies that specifically bind to the PRO polypeptide, for linking a
 bioactive molecule to a cell expressing a PRO protein and for modulating
 at least one biological activity of a cell. PRO polypeptides are useful
 for detecting other PRO polypeptides in a sample and for linking a
 bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 polypeptide antibodies are useful for modulating the biological activity
 of a cell expressing PRO polypeptides. The PRO polypeptides or
 polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 bioreactors. These are useful for stimulating hypertrophy of neonatal
 heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 proliferation of endothelial cells, modulating the proliferation of
 stimulated T-lymphocytes, enhancing the survival or proliferation of
 retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 -differentiation of chondrocytes. In particular, these are useful for

CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypopinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for PRO e.g. detecting its
 CC immunohistochemical staining and/or assay of serum and for affinity
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 1101 GCTGTCTCTCAGGGGAG 1116
 Db 3 GCTGTCTCTCAGGGGAG 18
 RESULT 1948
 ADG92325
 ID ADG92325 standard; DNA; 18 BP.
 XX
 AC ADG92325;
 XX
 DT 11-MAR-2004 (first entry)
 XX
 DE Human secreted/transmembrane protein, #44, PCR primer #2.
 XX
 KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypopinsulinaemia; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiac; vulnary; cytostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.
 XX
 OS Homo sapiens.
 XX
 PN US2003027145-A1.
 XX
 PD 06-FEB-2003.
 XX
 PF 17-JUL-2001; 2001US-00907613.
 XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.

[illegible]

PS Example 36; SEQ ID NO 229; 474pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides and the nucleic acid encoding them. The polypeptides can be used to raise antibodies that specifically bind to the PRO polypeptide, for linking a bioactive molecule to a cell expressing a PRO protein and for modulating at least one biological activity of a cell. PRO polypeptides are useful for detecting other PRO polypeptides in a sample and for linking a bioactive molecule to a cell expressing a PRO polypeptide. The PRO polypeptide antibodies are useful for modulating the biological activity of a cell expressing PRO polypeptides. The PRO polypeptides or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. These are useful for stimulating hypertrophy of neonatal heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated proliferation of endothelial cells, modulating the proliferation of stimulated T-lymphocytes, enhancing the survival or proliferation of retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial cells, modulating glucose or FFA uptake, inducing proliferation and/or re-differentiation of chondrocytes. In particular, these are useful for detecting or treating cardiac insufficiency disorders, wounds, cancerous tumours, retinal disorders or injuries (e.g. loss of sight due to retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia, hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or arthritis) in mammals. PRO polypeptides and their portions affect the expression of genes which have a role in cell death. The polynucleotides are useful in molecular biology including uses as hybridisation probes for cDNA library to isolate the full-length PRO cDNA or to isolate other cDNAs, in chromosome and gene mapping, in the generation of antisense RNA and DNA, for preparing PRO polypeptides, for generating transgenic animals or knockout animals which are useful in the development and screening of therapeutically useful reagents, as probes and for the genetic analysis of individuals with genetic disorders as well as for recombinantly expressing the protein and for chromosome identification. The proteins are useful as molecular marker for protein electrophoresis purposes, as therapeutic agents, for screening compounds to identify those that mimic the PRO polypeptide (agonists) or prevent the effect of the PRO polypeptide (antagonists). The polynucleotides and proteins are useful for tissue typing. PRO antibodies are useful for immunohistochemical staining and/or assay of sample fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The sequence presented is a PCR primer which was used to amplify a PRO polynucleotide of the invention.

Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGCTCCTCAGGGGAG 1116
 |||||
 DB 3 GCTGCTCCTCAGGGGAG 18

RESULT 1950
 ADH20541
 ID ADH20541 standard; DNA; 18 BP.
 AC ADH20541;
 XX
 XX 25-MAR-2004 (first entry)
 DT Human secreted/transmembrane protein, #44, PCR primer #2.
 DE
 DE Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;

KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiac; vulnerability; cytostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.
 XX Homo sapiens.
 OS
 PN US2004005553-A1.
 XX 08-JAN-2004.
 XX 18-JUL-2001; 2001US-00908576.
 XX 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059124P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065933P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 24-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 25-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 14-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 16-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.

20-NOV-1998; 98US-0109304P.
 21-DEC-1998; 98WO-US025108.
 22-DEC-1998; 98US-0113296P.
 07-JUL-1999; 99US-0143048P.
 26-JUL-1999; 99US-0145698P.
 28-JUL-1999; 99US-0146222P.
 08-SEP-1999; 99WO-US020594.
 13-SEP-1999; 99WO-US020944.
 15-SEP-1999; 99WO-US021090.
 05-OCT-1999; 99WO-US021547.
 09-OCT-1999; 99WO-US022308.
 29-NOV-1999; 99WO-US028214.
 30-NOV-1999; 99WO-US028313.
 01-DEC-1999; 99WO-US028301.
 02-DEC-1999; 99WO-US028564.
 02-DEC-1999; 99WO-US028565.
 16-DEC-1999; 99WO-US028565.
 20-DEC-1999; 99WO-US030095.
 20-DEC-1999; 99WO-US030911.
 20-DEC-1999; 99WO-US030999.
 05-JAN-2000; 2000WO-US000219.
 11-FEB-2000; 2000WO-US003565.
 22-FEB-2000; 2000WO-US004414.
 24-FEB-2000; 2000WO-US005004.
 02-MAR-2000; 2000WO-US005841.
 20-MAR-2000; 2000WO-US007377.
 30-MAR-2000; 2000WO-US008439.
 22-MAY-2000; 2000WO-US014042.
 02-JUN-2000; 2000WO-US015264.
 28-JUL-2000; 2000WO-US020710.
 24-AUG-2000; 2000WO-US023328.
 18-SEP-2000; 2000US-00665350.
 (GETH) GENENTECH INC.
 Ashkenazi A, Botstein D, Desnoyers L, Baton DL, Ferrara N;
 Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin LJ;
 Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 Williams PM, Wood WI;
 WPI; 2004-081703/08.
 New PRO nucleic acid, useful for manufacturing a medicament for
 diagnosing or treating tumor, for chromosome mapping or for tissue
 typing.
 Example 36; SEQ ID NO 229; 126pp; English.
 The invention discloses isolated PRO secreted/transmembrane polypeptides
 and the nucleic acid encoding them. The polypeptides can be used to raise
 antibodies that specifically bind to the PRO polypeptide, for linking a
 bioactive molecule to a cell expressing a PRO protein and for modulating
 at least one biological activity of a cell. PRO polypeptides are useful
 for detecting other PRO polypeptides in a sample and for linking a
 bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 polypeptide antibodies are useful for modulating the biological activity
 of a cell expressing PRO polypeptides. The PRO polypeptides or
 polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 bioeffectors. These are useful for stimulating hypertrophy of neonatal
 heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 proliferation of endothelial cells, modulating the proliferation of
 stimulated T-lymphocytes, enhancing the survival or proliferation of
 retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 differentiation of chondrocytes. In particular, these are useful for
 detecting or treating cardiac insufficiency disorders, wounds, cancerous
 tumours, retinal disorders or injuries (e.g. loss of sight due to
 retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 hypopinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
 arthritis) in mammals. PRO polypeptides and their portions affect the
 expression of genes which have a role in cell death. The polynucleotides
 are useful in molecular biology including uses as hybridisation probes
 for cDNA library to isolate the full-length PRO cDNA or to isolate other

CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCCTCAGGGAG 1116
 Db 3 GCTGTCCACAGGGAG 18
 RESULT 1951
 ADH07396
 ID ADH07396 standard; DNA; 18 BP.
 XX
 AC ADH07396;
 XX
 DT 25-MAR-2004 (first entry)
 DE Human secreted/transmembrane protein, #44, PCR primer #2.
 XX
 KW Human; PCR; primer; as; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW protein therapy.
 XX
 OS Homo sapiens.
 XX
 PN US2004006211-A1.
 XX
 PD 08-JAN-2004.
 XX
 PF 29-MAY-2003; 2003US-00448713.
 XX
 PR 24-OCT-1997; 97US-0063128P.
 PR 16-SEP-1998; 98WO-US019330.
 PR 30-NOV-1999; 99WO-US028313.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 18-SEP-2000; 2000US-00665350.
 PR 12-JUL-2001; 2001US-00905125.
 XX (DESN/) DESNOYERS L.
 PA (GODD/) GODDARD A.
 PA (GODO/) GODOWSKI P J.
 PA (GURN/) GURNEY A L.
 PA (MATH/) MATHER J P.
 PA (WILL/) WILLIAMS P M.
 PA (WOOD/) WOOD W I.
 XX Desnoyers L, Goddard A, Godowski PJ, Gurney AL, Mather JP;
 PI Williams PM, Wood WI;
 XX WPI; 2004-081748/08.
 DR
 XX New secreted and transmembrane PRO polypeptides and nucleic acids, useful
 PT

16-DEC-1999; 99WO-US030095.
 20-DEC-1999; 99WO-US030911.
 20-DEC-1999; 99WO-US030999.
 05-JAN-2000; 2000WO-US000219.
 11-FEB-2000; 2000WO-US0031565.
 22-FEB-2000; 2000WO-US004414.
 04-FEB-2000; 2000WO-US005004.
 24-MAR-2000; 2000WO-US005841.
 20-MAR-2000; 2000WO-US007377.
 30-MAR-2000; 2000WO-US008439.
 22-MAY-2000; 2000WO-US014042.
 02-JUN-2000; 2000WO-US015264.
 28-JUL-2000; 2000WO-US020710.
 24-AUG-2000; 2000WO-US023328.
 18-SEP-2000; 2000US-00665350.
 (GETH) GENENTECH INC.
 Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 Pilvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin LJ;
 Mather JP, Pan J, Faoni NF, Roy MA, Stewart TA, Tumas D;
 Williams PM, Wood WI;
 WPI; 2004-141684/14.
 Novel isolated native PRO polypeptide useful for tissue typing, as
 molecular weight markers in protein electrophoresis, for treating
 enterocolitis, Zollinger-Ellison syndrome, congenital microvillus
 atrophy.
 Example 36; SEQ ID NO 229; 470pp; English.
 The invention discloses isolated PRO secreted/transmembrane polypeptides
 and the nucleic acid encoding them. The polypeptides can be used to raise
 antibodies that specifically bind to the PRO polypeptide, for linking a
 bioactive molecule to a cell expressing a PRO protein and for modulating
 at least one biological activity of a cell. PRO polypeptides are useful
 for detecting other PRO polypeptides in a sample and for linking a
 bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 polypeptide antibodies are useful for modulating the biological activity
 of a cell expressing PRO polypeptides. The PRO polypeptides or
 polypeptide antibodies are useful as pharmaceuticals, diagnostics, biosensors or
 bioactuators. These are useful for stimulating hypertrophy of neonatal
 heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 proliferation of endothelial cells, modulating the proliferation of
 stimulated T-lymphocytes, enhancing the survival or proliferation of
 retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 -differentiation of chondrocytes, in particular, these are useful for
 detecting or treating cardiac insufficiency disorders, wounds, cancerous
 tumours, retinal disorders or injuries (e.g. loss of sight due to
 retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 hypotension, anemia, or bone or cartilage disorders (e.g. sports injuries or
 arthritis) in mammals. PRO polypeptides and their portions affect the
 expression of genes which have a role in cell death. The polynucleotides
 are useful in molecular biology including uses as hybridisation probes
 for cDNA library to isolate the full-length PRO cDNA or to isolate other
 cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 and DNA, for preparing PRO polypeptides, for generating transgenic
 animals or knockout animals which are useful in the development and
 screening of therapeutically useful reagents, as probes and for the
 genetic analysis of individuals with genetic disorders as well as for
 recombinantly expressing the protein and for chromosome identification.
 The proteins are useful as molecular marker for protein electrophoresis
 purposes, as therapeutic agents, for screening compounds to identify
 those that mimic the PRO polypeptide (agonists) or prevent the effect of
 the PRO polypeptide (antagonists). The polynucleotides and proteins are
 useful for tissue typing. PRO antibodies are useful for
 immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 antibodies are useful in diagnostic assays for PRO e.g. detecting its
 expression in specific cells, tissues or serum and for affinity
 purification of PRO from recombinant cell culture or natural sources. The

CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.
 XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. NO. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCTTCACGGGAG 1116
 Db 3 GCTGTCTTCACGGGAG 18
 RESULT 1953
 ADH06969
 ID ADH06969 standard; DNA; 18 BP.
 XX AC ADH06969;
 XX DT 25-MAR-2004 (first entry)
 XX DE Human secreted/transmembrane protein, #44, PCR primer #2.
 XX KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW protein therapy.
 XX OS Homo sapiens.
 XX PN US2004005665-A1.
 XX PD 08-JAN-2004.
 XX PF 29-MAY-2003; 2003US-00449656.
 XX PR 24-OCT-1997; 97US-0063128P.
 PR 16-SEP-1998; 98WO-US019330.
 PR 30-NOV-1999; 99WO-US028313.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 18-SEP-2000; 2000US-00665350.
 PR 17-JUL-2001; 2001US-00907794.
 XX (DESN/) DESNOYERS L.
 PA (GODD/) GODDARD A.
 PA (GODD/) GODOWSKI P J.
 PA (GURN/) GURNEY A L.
 PA (MATH/) MATHER J P.
 PA (WILL/) WILLIAMS P M.
 PA (WOOD/) WOOD W I.
 XX Desnoyers L, Goddard A, Godowski PJ, Gurney AL, Mather JP;
 PI Williams PM, Wood WI;
 PI WPI; 2004-081725/08.
 XX New PRO polypeptides and nucleic acid molecules, useful in gene therapy,
 PT or preparing a medicament for treating a condition that is responsive to
 PT the PRO polypeptide or anti-PRO antibody, e.g. inflammatory diseases,
 PT cancer or AIDS.
 XX Example 36; SEQ ID NO 229; 462pp; English.
 XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or

CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioreactors. The PRO sequences can be used in gene and protein therapy.
 CC The PRO polypeptide, the agonist or antagonist or the anti-PRO antibody
 CC can be used in the preparation of a medicament for the treatment of a
 CC condition which is responsive to the PRO polypeptide, the agonist or
 CC antagonist or the anti-PRO antibody. The nucleic acids encoding PRO
 CC polypeptides are used as hybridisation probes for gene mapping.
 CC generating transgenic animals useful in the development and screening of
 CC useful reagents, in chromosome identification or for tissue typing. The
 CC PRO polypeptides are also useful in gene therapy, may be employed as
 CC molecular weight markers for protein electrophoresis or as therapeutic
 CC agents. Anti-PRO antibodies are useful in diagnostic assays or for the
 CC affinity purification of PRO for recombinant cell culture or natural
 CC sources. The sequence presented is a PCR primer which was used to amplify
 CC a PRO polynucleotide of the invention.

SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCCTCAGGGGAG 1116
 Db 3 GCTGTCACAGGGGAG 18
 ||||| |||||

RESULT 1954

AD118711
 ID AD118711 standard; DNA; 18 BP.

XX AC AD118711;

DT 15-APR-2004 (first entry)

XX Human secreted/transmembrane protein, #44, PCR primer #2.

XX Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypotension; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiant; vulnary; cytosatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.

XX Homo sapiens.

OS US2003152999-A1.

PN 14-AUG-2003.

PD 12-JUL-2001; 2001US-00904766.

XX 17-SEP-1997; 97US-0059113P.

PR 17-SEP-1997; 97US-0059115P.

PR 17-SEP-1997; 97US-0059117P.

PR 17-SEP-1997; 97US-0059119P.

PR 17-SEP-1997; 97US-0059121P.

PR 17-SEP-1997; 97US-0059122P.

PR 17-SEP-1997; 97US-0059184P.

PR 18-SEP-1997; 97US-0059263P.

PR 18-SEP-1997; 97US-0059266P.

PR 18-SEP-1997; 97US-0062125P.

PR 17-OCT-1997; 97US-0062285P.

PR 21-OCT-1997; 97US-0062287P.

PR 21-OCT-1997; 97US-0063486P.

PR 24-OCT-1997; 97US-0062814P.

PR 24-OCT-1997; 97US-0062816P.

PR 24-OCT-1997; 97US-0063045P.

PR 24-OCT-1997; 97US-0063120P.

PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065893P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066840P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 14-SEP-1998; 98US-0100262P.
 PR 14-SEP-1998; 98US-0100262P.
 PR 16-SEP-1998; 98US-0100330P.
 PR 17-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98US-0100858P.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 21-DEC-1998; 98US-0113296P.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99US-0146222P.
 PR 13-SEP-1999; 99US-0146222P.
 PR 15-SEP-1999; 99US-0146222P.
 PR 15-SEP-1999; 99US-0146222P.
 PR 05-OCT-1999; 99US-0146222P.
 PR 29-NOV-1999; 99US-0146222P.
 PR 30-NOV-1999; 99US-0146222P.
 PR 01-DEC-1999; 99US-0146222P.
 PR 02-DEC-1999; 99US-0146222P.
 PR 16-DEC-1999; 99US-0146222P.
 PR 20-DEC-1999; 99US-0146222P.
 PR 20-DEC-1999; 99US-0146222P.
 PR 05-JAN-2000; 2000US-0000219.
 PR 11-FEB-2000; 2000US-00003565.
 PR 22-FEB-2000; 2000US-00004414.
 PR 24-FEB-2000; 2000US-00005004.
 PR 02-MAR-2000; 2000US-00005841.
 PR 20-MAR-2000; 2000US-00007377.
 PR 30-MAR-2000; 2000US-00008439.
 PR 22-MAY-2000; 2000US-00014042.
 PR 02-JUN-2000; 2000US-00015264.
 PR 28-JUL-2000; 2000US-00020710.
 PR 24-AUG-2000; 2000US-00023328.

PR 18-SEP-2000; 2000US-00665350.
 XX (GETH) GENENTECH INC.
 XX
 XX Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin LJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2004-020479/02.
 DR
 XX Sixty two isolated nucleic acids encoding a PRO polypeptide, e.g. PRO245
 PT or PRO168, useful for treating psoriasis and epithelial cancers such as
 PT lung squamous cell carcinoma.
 PT
 XX Example 36; SEQ ID NO 229; 426pp; English.
 PS
 XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioreactors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 CC differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypotension, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCCTCAGGGGAG 1116
 Db 3 GCTGTCACAGGGGAG 18

RESULT 1955
 ADI65431
 ID ADI65431 standard; DNA; 18 BP.
 XX
 AC ADI65431;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE Human secreted/transmembrane protein, #44, PCR primer #2.
 XX
 KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypotension; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiac; vulnary; cytostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.
 XX
 OS Homo sapiens.
 XX
 XX US2003148419-A1.
 PN
 XX 07-AUG-2003.
 PD
 XX 11-JUL-2001; 2001US-00903603.
 PF
 XX 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 28-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.

PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 22-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.
 XX

PA (GETH) GENENTECH INC.

XX Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin LJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2004-008942/01.

XX New PRO nucleic acid, useful for producing a PRO polypeptide,
 PT manufacturing a medicament for diagnosing or treating tumor, or for
 PT tissue typing.

XX Example 36; SEQ ID NO 229; 474bp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing C-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 CC differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypotension, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to

CC amplify a PRO polynucleotide of the invention.
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GCTGTCCTCAGGGGAG 1116
 Db 3 GCTGTCCTCAGGGGAG 18
 RESULT 1958
 ADH97490
 ID ADH97490 standard; DNA; 18 BP.
 XX
 AC ADH97490;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE Human secreted/transmembrane protein, #44, PCR primer #2.
 XX
 KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia; injury;
 KW hypotension; cartilage; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiac; vulvular; cytostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.
 XX
 OS Homo sapiens.
 XX
 PN US2003190610-A1.
 XX
 PD 09-OCT-2003.
 XX
 PF 16-JUL-2001; 2001US-00906618.
 XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0062125P.
 PR 15-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.

29-OCT-1997; 97US-0063734P.
 29-OCT-1997; 97US-0063735P.
 29-OCT-1997; 97US-0063738P.
 29-OCT-1997; 97US-0064215P.
 31-OCT-1997; 97US-0064387P.
 31-OCT-1997; 97US-0064103P.
 03-NOV-1997; 97US-0064248P.
 07-NOV-1997; 97US-0064809P.
 12-NOV-1997; 97US-0065186P.
 17-NOV-1997; 97US-0065846P.
 18-NOV-1997; 97US-0065933P.
 21-NOV-1997; 97US-0066120P.
 21-NOV-1997; 97US-0066364P.
 24-NOV-1997; 97US-0066453P.
 24-NOV-1997; 97US-0066466P.
 24-NOV-1997; 97US-0066511P.
 24-NOV-1997; 97US-0066770P.
 24-NOV-1997; 97US-0066772P.
 25-NOV-1997; 97US-0066840P.
 12-DEC-1997; 97US-0069425P.
 04-JUN-1998; 98US-0088026P.
 10-SEP-1998; 98US-0099803P.
 14-SEP-1998; 98WO-US013824.
 14-SEP-1998; 98US-0100362P.
 14-SEP-1998; 98WO-US013177.
 16-SEP-1998; 98US-01019330.
 17-SEP-1998; 98US-0100858P.
 17-SEP-1998; 98WO-US019437.
 13-OCT-1998; 98US-0104080P.
 20-NOV-1998; 98US-0109304P.
 01-DEC-1998; 98WO-US025108.
 22-DEC-1998; 98US-0113296P.
 07-JUL-1999; 99US-0143048P.
 26-JUL-1999; 99US-0145698P.
 28-JUL-1999; 99US-0146222P.
 08-SEP-1999; 99WO-US020594.
 13-SEP-1999; 99WO-US020944.
 15-SEP-1999; 99WO-US021090.
 15-SEP-1999; 99WO-US021547.
 05-OCT-1999; 99WO-US023089.
 29-NOV-1999; 99WO-US028214.
 30-NOV-1999; 99WO-US028313.
 01-DEC-1999; 99WO-US028301.
 02-DEC-1999; 99WO-US028564.
 02-DEC-1999; 99WO-US028565.
 16-DEC-1999; 99WO-US030095.
 20-DEC-1999; 99WO-US030911.
 20-DEC-1999; 99WO-US030999.
 05-JAN-2000; 2000WO-US000219.
 11-FEB-2000; 2000WO-US003565.
 22-FEB-2000; 2000WO-US004414.
 24-FEB-2000; 2000WO-US005004.
 02-MAR-2000; 2000WO-US005841.
 20-MAR-2000; 2000WO-US007377.
 30-MAR-2000; 2000WO-US008439.
 22-MAY-2000; 2000WO-US014042.
 02-JUN-2000; 2000WO-US015264.
 28-JUL-2000; 2000WO-US020710.
 24-AUG-2000; 2000WO-US023328.
 18-SEP-2000; 2000US-00665350.
 (GETH) GENENTECH INC.
 PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WPI; 2004-032142/03.
 DR New nucleic acid encoding a PRO polypeptide, useful for producing a
 XX recombinant PRO polypeptide and for treating tumors by gene therapy.
 PT

XX Example 36; SEQ ID NO 229; 471pp; English.
 PS The invention discloses isolated PRO secreted/transmembrane polypeptides
 XX and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioeffectors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 CC differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypotension, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a
 CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.
 XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.7e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1101 GGTGTCTCAGGGGAG 1116
 Db 3 GGTGTCCACAGGGGAG 18
 RESULT 1959
 ADI65858
 ID ADI65858 standard; DNA; 18 BP.
 XX
 AC ADI65858;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE Human secreted/transmembrane protein, #44, PCR primer #2.
 DE
 KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;

KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosa; obesity; diabete; hyperinsulinaemia;
KW hypotinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiac; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.

XX Homo sapiens.

XX US2003148371-A1.

XX 07-AUG-2003.

XX 16-JUL-2001; 2001US-00906777.

XX 17-SEP-1997; 97US-0059113P.

PR 17-SEP-1997; 97US-0059115P.

PR 17-SEP-1997; 97US-0059117P.

PR 17-SEP-1997; 97US-0059119P.

PR 17-SEP-1997; 97US-0059121P.

PR 17-SEP-1997; 97US-0059122P.

PR 17-SEP-1997; 97US-0059184P.

PR 18-SEP-1997; 97US-0059263P.

PR 18-SEP-1997; 97US-0059266P.

PR 15-OCT-1997; 97US-0062125P.

PR 17-OCT-1997; 97US-0062285P.

PR 17-OCT-1997; 97US-0062287P.

PR 21-OCT-1997; 97US-0063486P.

PR 24-OCT-1997; 97US-0062814P.

PR 24-OCT-1997; 97US-0062816P.

PR 24-OCT-1997; 97US-0063045P.

PR 24-OCT-1997; 97US-0063120P.

PR 24-OCT-1997; 97US-0063121P.

PR 24-OCT-1997; 97US-0063127P.

PR 27-OCT-1997; 97US-0063327P.

PR 27-OCT-1997; 97US-0063329P.

PR 28-OCT-1997; 97US-0063341P.

PR 28-OCT-1997; 97US-0063342P.

PR 28-OCT-1997; 97US-0063344P.

PR 28-OCT-1997; 97US-0063349P.

PR 28-OCT-1997; 97US-0063550P.

PR 28-OCT-1997; 97US-0063564P.

PR 29-OCT-1997; 97US-0063435P.

PR 29-OCT-1997; 97US-0063704P.

PR 29-OCT-1997; 97US-0063732P.

PR 29-OCT-1997; 97US-0063734P.

PR 29-OCT-1997; 97US-0063735P.

PR 29-OCT-1997; 97US-0063738P.

PR 29-OCT-1997; 97US-0064215P.

PR 31-OCT-1997; 97US-0063870P.

PR 31-OCT-1997; 97US-0064103P.

PR 03-NOV-1997; 97US-0064248P.

PR 07-NOV-1997; 97US-0064809P.

PR 12-NOV-1997; 97US-0065186P.

PR 17-NOV-1997; 97US-0065846P.

PR 18-NOV-1997; 97US-0065693P.

PR 21-NOV-1997; 97US-0066120P.

PR 21-NOV-1997; 97US-0066364P.

PR 24-NOV-1997; 97US-0066453P.

PR 24-NOV-1997; 97US-0066466P.

PR 24-NOV-1997; 97US-0066511P.

PR 24-NOV-1997; 97US-0066770P.

PR 25-NOV-1997; 97US-0066840P.

PR 12-DEC-1997; 97US-0069425P.

PR 04-JUN-1998; 98US-0088026P.

PR 10-SEP-1998; 98US-0099803P.

PR 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98US-0100262P.

PR 14-SEP-1998; 98WO-US019177.

PR 16-SEP-1998; 98WO-US019330.

PR 17-SEP-1998; 98WO-US0100858P.

PR 17-SEP-1998; 98WO-US019437.

PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 05-OCT-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 30-MAR-2000; 2000WO-US007377.
PR 20-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.

(GETH) GENENTECH INC.

PA Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;

XX WPI; 2004-020441/02.

DR Isolated secreted and transmembrane PRO nucleic acids and the proteins
XX they encode, e.g. PRO245, PRO269 and PRO1868, useful for preventing,
PT diagnosing and treating e.g. disorders relating to blood coagulation.

XX Example 36; SEQ ID NO 229; 478pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
CC hypotinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes

for cDNA library to isolate the full-length PRO cDNA or to isolate other cDNAs, in chromosome and gene mapping, in the generating transgenic cDNA and DNA, for preparing PRO polypeptides, for generating transgenic animals or knockout animals which are useful in the development and screening of therapeutically useful reagents, as probes and for the genetic analysis of individuals with genetic disorders as well as for recombinantly expressing the protein and for chromosome identification. The proteins are useful as molecular marker for protein electrophoresis purposes, as therapeutic agents, for screening compounds to identify those that mimic the PRO polypeptide (agonists) or prevent the effect of the PRO polypeptide (antagonists). The polynucleotides and proteins are useful for tissue typing. PRO antibodies are useful for immunohistochemical staining and/or assay of sample fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The sequence presented is a PCR primer which was used to amplify a PRO polynucleotide of the invention.

Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCTCTCAGGGGAG 1116

DB 3 GCTGTCTCAGGGGAG 18

RESULT 1960

ID ADH60601 standard; DNA; 18 BP.

AC ADH60601;

DT 22-APR-2004 (first entry)

DE Human secreted/transmembrane protein, #44, PCR primer #2.

KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic; tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation; endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
KW hypotension; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerability; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.

OS Homo sapiens.

XX US2004023331-A1.

PN 05-FEB-2004.

XX 28-APR-2003; 2003US-00425447.

XX 24-OCT-1997; 97US-0063128P.

PR 16-SEP-1998; 98WO-US019330.

PR 30-NOV-1999; 99WO-US028313.

PR 22-FEB-2000; 2000WO-US004414.

PR 18-SEP-2000; 2000US-00665350.

PR 17-JUL-2001; 2001US-00907794.

XX (DESN/) DESNOYERS L.

XX (GODD/) GODDARD A.

XX (GODD/) GODOWSKI P. J.

XX (GURN/) GURNEY A. L.

XX (MATH/) MATHER J. P. M.

(WOOD/) WOOD W I.

Desnoyers L, Goddard A, Godowski PJ, Gurney AL, Mather JP;

Williams PM, Wood WI;

WPI; 2004-142555/14.

New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or cancer.

Disclosure; SEQ ID NO 229; 428pp; English.

The invention discloses isolated PRO secreted/transmembrane polypeptides and the nucleic acid encoding them. The polypeptides can be used to raise antibodies that specifically bind to the PRO polypeptide, for linking a bioactive molecule to a cell expressing a PRO protein and for modulating at least one biological activity of a cell. PRO polypeptides are useful for detecting other PRO polypeptides in a sample and for linking a bioactive molecule to a cell expressing a PRO polypeptide. The PRO polypeptide antibodies are useful for modulating the biological activity of a cell expressing PRO polypeptides. The PRO polypeptides or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. These are useful for stimulating hypertrophy of neonatal heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated proliferation of endothelial cells, modulating the proliferation of stimulated T-lymphocytes, enhancing the survival or proliferation of retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial cells, modulating glucose or FFA uptake, inducing proliferation and/or re-differentiation of chondrocytes. In particular, these are useful for detecting or treating cardiac insufficiency disorders, wounds, cancerous tumours, retinal disorders or injuries (e.g. loss of sight due to retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia, hypotension, or bone or cartilage disorders (e.g. sports injuries or arthritis) in mammals. PRO polypeptides and their portions affect the expression of genes which have a role in cell death. The polynucleotides are useful in molecular biology including uses as hybridisation probes for cDNA library to isolate the full-length PRO cDNA or to isolate other cDNAs, in chromosome and gene mapping, in the generation of antisense RNA and DNA, for preparing PRO polypeptides, for generating transgenic animals or knockout animals which are useful in the development and screening of therapeutically useful reagents, as probes and for the genetic analysis of individuals with genetic disorders as well as for recombinantly expressing the protein and for chromosome identification. The proteins are useful as molecular marker for protein electrophoresis purposes, as therapeutic agents, for screening compounds to identify those that mimic the PRO polypeptide (agonists) or prevent the effect of the PRO polypeptide (antagonists). The polynucleotides and proteins are useful for tissue typing. PRO antibodies are useful for immunohistochemical staining and/or assay of sample fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The sequence presented is a PCR primer which was used to amplify a PRO polynucleotide of the invention.

Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCTCTCAGGGGAG 1116

DB 3 GCTGTCTCAGGGGAG 18

RESULT 1961

ADJ99658

ID ADJ99658 standard; DNA; 18 BP.

XX

AC ADJ99658;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Human secreted/transmembrane protein, #44, PCR primer #2.
 XX
 KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; PFA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia; injury;
 KW hypoinulinaemia; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiac; vulnerable; cytostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.
 XX
 OS Homo sapiens.
 XX
 PN US2003187238-A1.
 XX
 XX 02-OCT-2003.
 XX
 XX 11-JUL-2001; 2001US-00903562.
 XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0062816P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063435P.
 PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063732P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063735P.
 PR 29-OCT-1997; 97US-0063738P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064809P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.

PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98US-0100858P.
 PR 17-SEP-1998; 98US-0100858P.
 PR 13-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025108.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 16-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.

(GETH) GENENTECH INC.

PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N,
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;

DR WPI; 2004-032054/03.

PT Isolated nucleic acid for making vector for host cell, comprises
 PT specified sequence identity to nucleotide sequence that encodes
 PT polypeptide having amino acid sequence.

PS Example 36; SEQ ID NO 229; 470pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioreactors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of

stimulated T-lymphocytes, enhancing the survival or proliferation of
retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
cells, modulating glucose or FFA uptake, inducing proliferation and/or re
differentiation of chondrocytes. In particular, these are useful for
detecting or treating cardiac insufficiency disorders, wounds, cancerous
tumours, retinal disorders or injuries (e.g. loss of sight due to
retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
arthritis) in mammals. PRO polypeptides and their portions affect the
expression of genes which have a role in cell death. The polynucleotides
are useful in molecular biology including uses as hybridisation probes
for cDNA library to isolate the full-length PRO cDNA or to isolate other
cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
and DNA, for preparing PRO polypeptides, for generating transgenic
animals or knockout animals which are useful in the development and
screening of therapeutically useful reagents, as probes and for the
genetic analysis of individuals with genetic disorders as well as for
recombinantly expressing the protein and for chromosome identification.
The proteins are useful as molecular marker for protein electrophoresis
purposes, as therapeutic agents, for screening compounds to identify
those that mimic the PRO polypeptide (agonists) or prevent the effect of
the PRO polypeptide (antagonists). The polynucleotides and proteins are
useful for tissue typing. PRO antibodies are useful for
immunohistochemical staining and/or assay of sample fluids. Anti-PRO
antibodies are useful in diagnostic assays for PRO e.g. detecting its
expression in specific cells, tissues or serum and for affinity
purification of PRO from recombinant cell culture or natural sources. The
PRO genes may also be used in gene therapy, particularly for replacing a
defective gene. The sequence presented is a PCR primer which was used to
amplify a PRO polynucleotide of the invention.

Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCCTCAGGGGAG 1116
DB 3 GCTGTCACAGGGGAG 18

RESULT 1962

ADL08851
ID ADL08851 standard; DNA; 18 BP.

XX AC ADL08851;

XX DT 06-MAY-2004 (first entry)

XX DE Human secreted/transmembrane protein, #44, PCR primer #2.

XX KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
tissue typing; immunohistochemical staining; gene therapy;
neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
endothelial cell; stimulated T-lymphocyte; retinal neuron;
rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
arthritis; cardiast; vulnary; cyostatic; ophthalmological;
osteopathic; antiarthritic; anorectic.

OS Homo sapiens.

XX PN US2003186358-A1.

XX PD 02-OCT-2003.

XX PF 12-JUL-2001; 2001US-00904877.

XX PR 17-SEP-1997; 97US-0059113P.

PR 17-SEP-1997; 97US-0059115P.

PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 18-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
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PR 29-OCT-1997; 97US-0063738P.
PR 31-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069423P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 14-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 16-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 21-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.

PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 30-MAR-2000; 2000WO-US007377.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.
 XX

(GETH) GENENTECH INC.

XX Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Klijavin LJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX

DR WPI; 2004-041195/04.

XX New isolated nucleic acid molecule for use in molecular biology, as
 PT hybridization probe, in chromosome and gene mapping, and in generation of
 PT anti-sense ribonucleic acid and deoxyribonucleic acid.

PS Example 36; SEQ ID NO 229; 472pp; English.

XX The invention discloses isolated PRO secreted/transmembrane polypeptides
 CC and the nucleic acid encoding them. The polypeptides can be used to raise
 CC antibodies that specifically bind to the PRO polypeptide, for linking a
 CC bioactive molecule to a cell expressing a PRO protein and for modulating
 CC at least one biological activity of a cell. PRO polypeptides are useful
 CC for detecting other PRO polypeptides in a sample and for linking a
 CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
 CC polypeptide antibodies are useful for modulating the biological activity
 CC of a cell expressing PRO polypeptides. The PRO polypeptides or
 CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
 CC bioreactors. These are useful for stimulating hypertrophy of neonatal
 CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
 CC proliferation of endothelial cells, modulating the proliferation of
 CC stimulated T-lymphocytes, enhancing the survival or proliferation of
 CC retinal neurons or rod photoreceptor cells, inducing C-fos in endothelial
 CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
 CC -differentiation of chondrocytes. In particular, these are useful for
 CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
 CC tumours, retinal disorders or injuries (e.g. loss of sight due to
 CC retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
 CC hypopinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
 CC arthritis) in mammals. PRO polypeptides and their portions affect the
 CC expression of genes which have a role in cell death. The polynucleotides
 CC are useful in molecular biology including uses as hybridisation probes
 CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
 CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
 CC and DNA, for preparing PRO polypeptides, for generating transgenic
 CC animals or knockout animals which are useful in the development and
 CC screening of therapeutically useful reagents, as probes and for the
 CC genetic analysis of individuals with genetic disorders as well as for
 CC recombinantly expressing the protein and for chromosome identification.
 CC The proteins are useful as molecular marker for protein electrophoresis
 CC purposes, as therapeutic agents, for screening compounds to identify
 CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
 CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
 CC useful for tissue typing. PRO antibodies are useful for
 CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
 CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
 CC expression in specific cells, tissues or serum and for affinity
 CC purification of PRO from recombinant cell culture or natural sources. The
 CC PRO genes may also be used in gene therapy, particularly for replacing a

CC defective gene. The sequence presented is a PCR primer which was used to
 CC amplify a PRO polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

SQ Query Match 0.4%; Score 14.4; DB 1; Length 18;

XX Best Local Similarity 93.8%; Pred. No. 1.7e+03;

XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 GCTGTCCTCAGGGGAG 1116

Db 3 GCTGTCACAGGGGAG 18

RESULT 1963

ADM25192

ID ADM25192 standard; DNA; 18 BP.

XX

AC ADM25192;

XX

DT 20-MAY-2004 (first entry)

XX

DE Human secreted/transmembrane protein, #44, PCR primer #2.

XX

KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy;
 KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; PPA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
 KW hypopinsulinaemia; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiac; vulnary; cytostatic; ophthalmological;
 KW osteopathic; antiarthritic; anorectic.

XX Homo sapiens.

XX

PN US2003096233-A1.

XX

PD 22-MAY-2003.

XX

PF 11-JUL-2001; 2001US-00903925.

XX

PR 17-SEP-1997; 97US-0059113P.

PR 17-SEP-1997; 97US-0059115P.

PR 17-SEP-1997; 97US-0059117P.

PR 17-SEP-1997; 97US-0059119P.

PR 17-SEP-1997; 97US-0059121P.

PR 17-SEP-1997; 97US-0059122P.

PR 18-SEP-1997; 97US-0059184P.

PR 18-SEP-1997; 97US-0059266P.

PR 15-OCT-1997; 97US-0062125P.

PR 17-OCT-1997; 97US-0062285P.

PR 17-OCT-1997; 97US-0062287P.

PR 21-OCT-1997; 97US-0063486P.

PR 24-OCT-1997; 97US-0062814P.

PR 24-OCT-1997; 97US-0062816P.

PR 24-OCT-1997; 97US-0063045P.

PR 24-OCT-1997; 97US-0063120P.

PR 24-OCT-1997; 97US-0063121P.

PR 24-OCT-1997; 97US-0063127P.

PR 24-OCT-1997; 97US-0063128P.

PR 27-OCT-1997; 97US-0063327P.

PR 27-OCT-1997; 97US-0063329P.

PR 28-OCT-1997; 97US-0063541P.

PR 28-OCT-1997; 97US-0063542P.

PR 28-OCT-1997; 97US-0063544P.

PR 28-OCT-1997; 97US-0063549P.

PR 28-OCT-1997; 97US-0063550P.

PR 28-OCT-1997; 97US-0063564P.

PR 29-OCT-1997; 97US-0063435P.

PR 29-OCT-1997; 97US-0063704P.

29-OCT-1997; 97US-0063732P.
29-OCT-1997; 97US-0063734P.
29-OCT-1997; 97US-0063735P.
29-OCT-1997; 97US-0063738P.
29-OCT-1997; 97US-0064215P.
31-OCT-1997; 97US-0063870P.
31-OCT-1997; 97US-0064103P.
31-OCT-1997; 97US-0064248P.
31-OCT-1997; 97US-0064809P.
31-OCT-1997; 97US-0065186P.
17-NOV-1997; 97US-0065846P.
18-NOV-1997; 97US-0065933P.
21-NOV-1997; 97US-0066120P.
21-NOV-1997; 97US-0066364P.
24-NOV-1997; 97US-0066453P.
24-NOV-1997; 97US-0066466P.
24-NOV-1997; 97US-0066511P.
24-NOV-1997; 97US-0066770P.
24-NOV-1997; 97US-0066772P.
25-NOV-1997; 97US-0066840P.
12-DEC-1997; 97US-0069425P.
04-JUN-1998; 98US-0088026P.
10-SEP-1998; 98US-0099803P.
10-SEP-1998; 98US-0099803P.
14-SEP-1998; 98US-0100262P.
14-SEP-1998; 98US-0101917P.
16-SEP-1998; 98US-0101917P.
17-SEP-1998; 98US-0100858P.
17-SEP-1998; 98US-0101943P.
13-OCT-1998; 98US-0104080P.
20-NOV-1998; 98US-0109304P.
01-DEC-1998; 98US-0109304P.
22-DEC-1998; 98US-0113296P.
07-JUL-1999; 99US-0143048P.
26-JUL-1999; 99US-0145698P.
28-JUL-1999; 99US-0146222P.
08-SEP-1999; 99US-0146222P.
13-SEP-1999; 99US-0200944.
15-SEP-1999; 99US-0201090.
15-SEP-1999; 99US-0201547.
05-OCT-1999; 99US-0203089.
20-NOV-1999; 99US-0203089.
20-NOV-1999; 99US-0203113.
01-DEC-1999; 99US-0203101.
02-DEC-1999; 99US-0203564.
02-DEC-1999; 99US-0203564.
16-DEC-1999; 99US-0203565.
20-DEC-1999; 99US-0203565.
20-DEC-1999; 99US-0203565.
05-JAN-2000; 2000US-0200219.
11-FEB-2000; 2000US-0200219.
22-FEB-2000; 2000US-0200414.
24-FEB-2000; 2000US-0200504.
02-MAR-2000; 2000US-02005841.
20-MAR-2000; 2000US-02007377.
30-MAR-2000; 2000US-02008439.
22-MAY-2000; 2000US-02014042.
02-JUN-2000; 2000US-02015264.
28-JUL-2000; 2000US-02020710.
24-AUG-2000; 2000US-02023328.
18-SEP-2000; 2000US-02023328.
18-SEP-2000; 2000US-02023328.
(GETH) GENENTECH INC.
Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
P Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
P Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kijavini IJ;
P Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
P Williams PM, Wood WI;
XX
XX WPI; 2004-096547/10.
XX
XX Sixty one isolated nucleic acids encoding a PRO polypeptide, e.g. PRO245

PT or PRO1868, useful in chromosome and gene mapping, in generating
PT antisense RNA and DNA, and in treating cancer and Alzheimer's disease.
XX
PS Example 36; SEQ ID NO 229; 483pp; English.
XX
The invention discloses isolated PRO secreted/transmembrane polypeptides
and the nucleic acid encoding them. The polypeptides can be used to raise
antibodies that specifically bind to the PRO polypeptide, for linking a
bioactive molecule to a cell expressing a PRO protein and for modulating
at least one biological activity of a cell. PRO polypeptides are useful
for detecting other PRO polypeptides in a sample and for linking a
bioactive molecule to a cell expressing a PRO polypeptide. The PRO
polypeptide antibodies are useful for modulating the biological activity
of a cell expressing PRO polypeptides. The PRO polypeptides or
polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
bioreactors. These are useful for stimulating hypertrophy of neonatal
heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
proliferation of endothelial cells, modulating the proliferation of
stimulated T-lymphocytes, enhancing the survival or proliferation of
retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
cells, modulating glucose or FFA uptake, inducing proliferation and/or re
differentiation of chondrocytes. In particular, these are useful for
detecting or treating cardiac insufficiency disorders, wounds, cancerous
tumours, retinal disorders or injuries (e.g. loss of sight due to
retinitis pigmentosa), obesity, diabetes, hyperinsulinaemia,
hypoparathyroidism, or bone or cartilage disorders (e.g. sports injuries or
arthritis) in mammals. PRO polypeptides and their portions affect the
expression of genes which have a role in cell death. The polynucleotides
are useful in molecular biology including uses as hybridisation probes
for cDNA library to isolate the full-length PRO cDNA or to isolate other
cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
and DNA, for preparing PRO polypeptides, for generating transgenic
animals or knockout animals which are useful in the development and
screening of therapeutically useful reagents, as probes and for the
genetic analysis of individuals with genetic disorders as well as for
recombinantly expressing the protein and for chromosome identification.
The proteins are useful as molecular marker for protein electrophoresis
purposes, as therapeutic agents, for screening compounds to identify
those that mimic the PRO polypeptide (agonists) or prevent the effect of
the PRO polypeptide (antagonists). The polynucleotides and proteins are
useful for tissue typing. PRO antibodies are useful for sample fluids. Anti-PRO
immunohistochemical staining and/or assay of sample fluids. Anti-PRO
antibodies are useful in diagnostic assays for PRO e.g. detecting its
expression in specific cells, tissues or serum and for affinity
purification of PRO from recombinant cell culture or natural sources. The
PRO genes may also be used in gene therapy, particularly for replacing a
defective gene. The sequence presented is a PCR primer which was used to
amplify a PRO polynucleotide of the invention.
XX
SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1101 GCTGTCCTCAGGGAG 1116
DB 3 GCTGTCCTCAGGGAG 18
RESULT 1964
ADM29942
ID ADM29942 standard; DNA; 18 BP.
XX
AC ADM29942;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human secreted/transmembrane protein, #44, PCR primer #2.
XX
KW Human; PCR; primer; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;

endothelial cell; stimulated T-lymphocyte; retinal neuron;
rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
retinitis pigmentosa; obesity; diabetes; hyperinsulinaemia;
hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
arthritis; cardiac; vulnarary; cyostatic; ophthalmological;
osteopathic; antiarthritic; anorectic.

Homo sapiens.

US2003190611-A1.

09-OCT-2003.

17-JUL-2001; 2001US-00907728.

17-SEP-1997; 97US-0059113P.

17-SEP-1997; 97US-0059115P.

17-SEP-1997; 97US-0059117P.

17-SEP-1997; 97US-0059119P.

17-SEP-1997; 97US-0059121P.

17-SEP-1997; 97US-0059122P.

17-SEP-1997; 97US-0059184P.

18-SEP-1997; 97US-0059263P.

18-SEP-1997; 97US-0059266P.

15-OCT-1997; 97US-0062125P.

17-OCT-1997; 97US-0062285P.

17-OCT-1997; 97US-0062287P.

21-OCT-1997; 97US-0063486P.

24-OCT-1997; 97US-0062814P.

24-OCT-1997; 97US-0062816P.

24-OCT-1997; 97US-0063120P.

24-OCT-1997; 97US-0063121P.

24-OCT-1997; 97US-0063127P.

24-OCT-1997; 97US-0063128P.

27-OCT-1997; 97US-0063327P.

27-OCT-1997; 97US-0063329P.

28-OCT-1997; 97US-0063341P.

28-OCT-1997; 97US-0063342P.

28-OCT-1997; 97US-0063344P.

28-OCT-1997; 97US-0063349P.

28-OCT-1997; 97US-0063350P.

28-OCT-1997; 97US-0063356P.

29-OCT-1997; 97US-0063435P.

29-OCT-1997; 97US-0063704P.

29-OCT-1997; 97US-0063732P.

29-OCT-1997; 97US-0063734P.

29-OCT-1997; 97US-0063735P.

29-OCT-1997; 97US-0063738P.

31-OCT-1997; 97US-0064215P.

31-OCT-1997; 97US-0063870P.

31-OCT-1997; 97US-0064103P.

03-NOV-1997; 97US-0064248P.

12-NOV-1997; 97US-0064809P.

12-NOV-1997; 97US-0065186P.

17-NOV-1997; 97US-0065846P.

18-NOV-1997; 97US-006593P.

21-NOV-1997; 97US-0066120P.

21-NOV-1997; 97US-0066364P.

24-NOV-1997; 97US-0066453P.

24-NOV-1997; 97US-0066466P.

24-NOV-1997; 97US-0066511P.

24-NOV-1997; 97US-0066770P.

24-NOV-1997; 97US-0066772P.

25-NOV-1997; 97US-0066840P.

12-DEC-1997; 97US-0069425P.

04-JUN-1998; 98US-0088026P.

10-SEP-1998; 98US-0099803P.

10-SEP-1998; 98US-0099803P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

14-SEP-1998; 98US-0100262P.

17-SEP-1998; 98US-0100858P.

17-SEP-1998; 98US-0100858P.

13-OCT-1998; 98US-0104080P.

20-NOV-1998; 98US-0109304P.

01-DEC-1998; 98US-0109304P.

22-DEC-1998; 98US-0113296P.

07-JUL-1999; 98US-0113296P.

26-JUL-1999; 98US-0143048P.

26-JUL-1999; 98US-0143048P.

28-JUL-1999; 98US-0146222P.

08-SEP-1999; 98US-0146222P.

13-SEP-1999; 98US-0146222P.

13-SEP-1999; 98US-0146222P.

15-SEP-1999; 98US-0146222P.

15-SEP-1999; 98US-0146222P.

05-OCT-1999; 98US-0146222P.

29-NOV-1999; 98US-0146222P.

30-NOV-1999; 98US-0146222P.

01-DEC-1999; 98US-0146222P.

02-DEC-1999; 98US-0146222P.

02-DEC-1999; 98US-0146222P.

16-DEC-1999; 98US-0146222P.

20-DEC-1999; 98US-0146222P.

20-DEC-1999; 98US-0146222P.

05-JAN-2000; 2000US-0000219.

11-FEB-2000; 2000US-0000219.

22-FEB-2000; 2000US-0000219.

24-FEB-2000; 2000US-0000219.

02-MAR-2000; 2000US-0000219.

20-MAR-2000; 2000US-0000219.

30-MAR-2000; 2000US-0000219.

22-MAY-2000; 2000US-0000219.

02-JUN-2000; 2000US-0000219.

28-JUL-2000; 2000US-0000219.

28-JUL-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

17-SEP-1998; 98US-0100858P.

17-SEP-1998; 98US-0100858P.

13-OCT-1998; 98US-0104080P.

20-NOV-1998; 98US-0109304P.

01-DEC-1998; 98US-0109304P.

22-DEC-1998; 98US-0113296P.

07-JUL-1999; 98US-0113296P.

26-JUL-1999; 98US-0143048P.

26-JUL-1999; 98US-0143048P.

28-JUL-1999; 98US-0146222P.

08-SEP-1999; 98US-0146222P.

13-SEP-1999; 98US-0146222P.

13-SEP-1999; 98US-0146222P.

15-SEP-1999; 98US-0146222P.

15-SEP-1999; 98US-0146222P.

05-OCT-1999; 98US-0146222P.

29-NOV-1999; 98US-0146222P.

30-NOV-1999; 98US-0146222P.

01-DEC-1999; 98US-0146222P.

02-DEC-1999; 98US-0146222P.

02-DEC-1999; 98US-0146222P.

16-DEC-1999; 98US-0146222P.

20-DEC-1999; 98US-0146222P.

20-DEC-1999; 98US-0146222P.

05-JAN-2000; 2000US-0000219.

11-FEB-2000; 2000US-0000219.

22-FEB-2000; 2000US-0000219.

24-FEB-2000; 2000US-0000219.

02-MAR-2000; 2000US-0000219.

20-MAR-2000; 2000US-0000219.

30-MAR-2000; 2000US-0000219.

22-MAY-2000; 2000US-0000219.

02-JUN-2000; 2000US-0000219.

28-JUL-2000; 2000US-0000219.

28-JUL-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

17-SEP-1998; 98US-0100858P.

17-SEP-1998; 98US-0100858P.

13-OCT-1998; 98US-0104080P.

20-NOV-1998; 98US-0109304P.

01-DEC-1998; 98US-0109304P.

22-DEC-1998; 98US-0113296P.

07-JUL-1999; 98US-0113296P.

26-JUL-1999; 98US-0143048P.

26-JUL-1999; 98US-0143048P.

28-JUL-1999; 98US-0146222P.

08-SEP-1999; 98US-0146222P.

13-SEP-1999; 98US-0146222P.

13-SEP-1999; 98US-0146222P.

15-SEP-1999; 98US-0146222P.

15-SEP-1999; 98US-0146222P.

05-OCT-1999; 98US-0146222P.

29-NOV-1999; 98US-0146222P.

30-NOV-1999; 98US-0146222P.

01-DEC-1999; 98US-0146222P.

02-DEC-1999; 98US-0146222P.

02-DEC-1999; 98US-0146222P.

16-DEC-1999; 98US-0146222P.

20-DEC-1999; 98US-0146222P.

20-DEC-1999; 98US-0146222P.

05-JAN-2000; 2000US-0000219.

11-FEB-2000; 2000US-0000219.

22-FEB-2000; 2000US-0000219.

24-FEB-2000; 2000US-0000219.

02-MAR-2000; 2000US-0000219.

20-MAR-2000; 2000US-0000219.

30-MAR-2000; 2000US-0000219.

22-MAY-2000; 2000US-0000219.

02-JUN-2000; 2000US-0000219.

28-JUL-2000; 2000US-0000219.

28-JUL-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

18-SEP-2000; 2000US-0000219.

17-SEP-1998; 98US-0100858P.

17-SEP-1998; 98US-0100858P.

13-OCT-1998; 98US-0104080P.

20-NOV-1998; 98US-0109304P.

01-DEC-1998; 98US-0109304P.

22-DEC-1998; 98US-0113296P.

07-JUL-1999; 98US-0113296P.

26-JUL-1999; 98US-0143048P.

26-JUL-1999; 98US-0143048P.

28-JUL-1999; 98US-0146222P.

08-SEP-1999; 98US-0146222P.

13-SEP-1999; 98US-0146222P.

13-SEP-1999; 98US-0146222P.

15-SEP-1999; 98US-0146222P.

15-SEP-1999; 98US-0146222P.

05-OCT-1999; 98US-0146222P.

29-NOV-1999; 98US-0146222P.

30-NOV-1999; 98US-0146222P.

01-DEC-1999; 98US-0146222P.

02-DEC-1999

are useful in molecular biology including uses as hybridisation probes for cDNA library to isolate the full-length PRO cDNA or to isolate other cDNAs, in chromosome and gene mapping, in the generation of antisense RNA and DNA, for preparing PRO polypeptides, for generating transgenic animals or knockout animals which are useful in the development and screening of therapeutically useful reagents, as probes and for the genetic analysis of individuals with genetic disorders as well as for recombinantly expressing the protein and for chromosome identification. The proteins are useful as molecular marker for protein electrophoresis purposes, as therapeutic agents, for screening compounds to identify those that mimic the PRO polypeptide (agonists) or prevent the effect of the PRO polypeptide (antagonists). The polynucleotides and proteins are useful for tissue typing. PRO antibodies are useful for immunohistochemical staining and/or assay of sample fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The sequence presented is a PCR primer which was used to amplify a PRO polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1101 GCTGTCCTCAGGGGAG 1116
||||| |||||
Db 3 GCTGTCCACAGGGGAG 18

RESULT 1965
AD006264
ID ADO06264 standard; DNA; 18 BP.

XX AC ADO06264;
XX 01-JUL-2004 (first entry)
XX Human PRO PCR primer #102.
XX Human; PRO; ss; affinity purification; PCR; primer.
XX Homo sapiens.
XX US6686451-B1.
XX 03-FEB-2004.
XX 10-JUL-2001; 2001US-00902775.
XX 24-OCT-1997; 97US-0063128P.
XX 16-SEP-1998; 98WO-US019330.
XX 30-NOV-1999; 99WO-US028313.
XX 22-FEB-2000; 2000WO-US004414.
XX 18-SEP-2000; 2000US-00665350.
XX (GETH) GENENTECH INC.
XX Desnoyers L, Goddard A, Godowski PJ, Gurney AL, Mather JP;
XX Williams PM, Wood WI;
XX WPI; 2004-106364/11.
XX New antibodies binding PRO polypeptides, useful in gene therapy, or in
XX diagnostic assays for the PRO polypeptides, or for the affinity
XX purification of PRO polypeptides from recombinant cell culture or natural
XX sources.
XX Example 36; SEQ ID NO 229; 445pp; English.
XX The invention relates to an antibody that binds to a human PRO

CC polypeptide. The invention also relates to human PRO polynucleotides
CC encoding the PRO polypeptides of the invention. The antibody is a
CC monoclonal or humanised antibody, or is an antibody fragment, and is
CC preferably labelled. The anti-PRO antibodies may be used in diagnostic
CC assays for PRO, or for the affinity purification of PRO from recombinant
CC cell culture or natural sources. This sequence represents a PCR primer
XX used in isolation of a human PRO polynucleotide of the invention.

XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1101 GCTGTCCTCAGGGGAG 1116
||||| |||||
Db 3 GCTGTCCACAGGGGAG 18

RESULT 1966
AD017042
ID ADO17042 standard; DNA; 18 BP.

XX AC ADO17042;
XX 01-JUL-2004 (first entry)
XX Human LIPIN3 exon10 PCR primer seqid 34.
XX LIPIN3; obesity; obesity-related disorder; differential expression;
XX polynucleotide polymorphism; adipocyte; human; PCR; primer; ss.
XX Homo sapiens.
XX US2004018497-A1.
XX 29-JAN-2004.
XX 26-JUL-2002; 2002US-00206618.
XX 26-JUL-2002; 2002US-00206618.
XX (WARD/) WARDEN C H.
XX Warden CH;
XX WPI; 2004-122019/12.
XX Novel isolated LIPIN3 polypeptide, useful for diagnosing diabetes.
XX Example 5; SEQ ID NO 33; 58pp; English.

XX The invention describes an isolated polypeptide (I) comprising a
XX polypeptide having a fully defined LIPIN3 sequence (S1) of 806 amino
XX acids as given in the specification or a region consisting of 5 or more
XX contiguous amino acids, where the region includes amino acid of 634 of
XX (S1). Also described are: an isolated polynucleotide (II) comprising a
XX fully defined sequence (S2) of 2405 base pair as given in the
XX specification, or its complement, a polynucleotide that selectively
XX hybridizes to (S2) relative to a known polynucleotide, or a region of 15
XX or more contiguous nucleotides, the region comprising nucleotide 1904 of
XX (S2); vector, preferably an expression vector (III) comprising (II); a
XX host cell (IV) comprising (II); detecting (M1) differential expression of
XX a LIPIN3 polynucleotide in a test sample; detecting obesity or obesity-
XX related disorders associated with differential expression of a LIPIN3
XX polynucleotide comprising a detecting a level of expression of (V), or
XX (VI), or a region of (V) or (VI), where the region is 10 or more
XX nucleotides in length; screening (M2) for agents that reduce the
XX expression of a (II) in a test cell sample; antibodies that specifically
XX bind to (I); a recombinant cell comprising a recombinantly modified (II),
XX such that the (II) is overexpressed; a composition comprising (I); an
XX array comprising two or more (II); and identifying an alteration in
XX LIPIN3 gene associated with obesity or an obesity related disorder. (II)

CC is useful for detecting a polynucleotide polymorphism associated with obesity. (ii) is useful for diagnosing obesity an obesity-related disorder which involves detecting (i). In (M2), the cell is an adipocyte. The test agent is chosen from antibody, protein, nucleic acid, and small organic molecule. This sequence represents a primer used to identify single nucleotide polymorphisms in the human Lipin3 gene that may be associated with obesity.

XX Sequence 18 BP; 3 A; 12 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 315 CAACCCCACTCCCTCC 330
DB 2 CAACCCCTCTCCCTCC 17

RESULT 1967
AAQ93237/C
ID AAQ93237 standard; DNA; 19 BP.

XX AC AAQ93237;
XX 28-FEB-1996 (first entry)
XX ACCase gene fragment primer BCCP1.
XX Polymerase chain reaction; PCR; primer; amplify; acetyl CoA carboxylase;
XX ACCase; transgenic plant; regulation; fat; protein; agricultural plant;
XX ss.
XX Synthetic.
XX JP07143887-A.
XX 06-JUN-1995.
XX 28-JUN-1994; 94JP-00146827.
XX 17-AUG-1993; 93JP-00203477.
XX (MITS-) MITSUI GYOSAI SHOKUBUTSU BIO KENKYUSHO.
XX WPI; 1995-236465/31.
XX Plant acetyl CoA carboxylase gene obtd. by PCR amplification - useful for
XX increasing fat/protein content in plants.
XX Disclosure; Page 13; 33pp; Japanese.
XX The sequences given in AAQ93237-40 are primers which were used in the
XX amplification of a gene fragment from the acetyl CoA carboxylase (ACCase)
XX gene. The full length ACCase gene may be used to produce a transgenic
XX plant such that it expresses a changed amount of ACCase. The ACCase gene
XX may be used to regulate the production of fat/protein in agricultural
XX plants

XX Sequence 19 BP; 5 A; 5 C; 1 G; 7 T; 0 U; 1 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 19;
Best Local Similarity 83.3%; Pred. No. 1.8e+03;
Matches 15; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1354 GAGATGATGAAGATGATC 1371
DB 19 GARGTTATGAAGATGATC 2

RESULT 1968
AAV99272/C
ID AAV99272 standard; DNA; 19 BP.

XX AAV99272;
XX 09-MAR-1999 (first entry)
XX HIV gag homology region and regulatory factor (human RIP protein kinase).
XX defibrotide; polyanion salt; HIV; protozoan infection; schistosoma;
XX Schistosoma Leishmania; Trypanosoma; fungus infection;
XX Pneumocystis carinii; malaria; viral infection; genetic disease;
XX Duchenne's muscular dystrophy; Down's syndrome; degenerative disease;
XX neoplasia; cancer; skin condition; drug resistance; ss.
XX Synthetic.
XX Human immunodeficiency virus.
XX Homo sapiens.
XX WO9848843-A1.
XX 05-NOV-1998.
XX 28-APR-1998; 98WO-US008357.
XX 28-APR-1997; 97US-00848013.
XX (BURC/) BURCOGLU A.
XX Burcoglu A;
XX WPI; 1999-034643/03.
XX Use of defibrotide nucleic acid components - for treating e.g. infectious
XX diseases, genetic diseases, degenerative diseases, DNA damage, neoplasia
XX and skin disease, particularly HIV infection.
XX Claim 33; Page 84; 96pp; English.
XX Oligonucleotides AAV99271-80 represent modified defibrotide sequences
XX containing a Human immunodeficiency virus (HIV) homology region and a
XX cellular regulatory factor. Defibrotide is a polyanion salt of a
XX deoxyribonucleic acid obtained from mammalian tissue. The products can be
XX used for treating diseases such as infectious disease such as HIV
XX infection, protozoan infection, schistosoma infection e.g. Schistosoma
XX japonicum, Schistosoma Leishmania infection, Trypanosoma infection e.g.
XX Trypanosoma Cruzi, and fungus infection e.g. Candida tropicalis and
XX Candida Albicans, Aspergillus infection, Pneumocystis carinii infection,
XX malaria, Plasmodium vivax, gram negative bacterial infection.
XX Cytomegalovirus infection, Hepatitis virus infection, human papilloma
XX virus infection; genetic diseases e.g. Duchenne's muscular dystrophy and
XX Down's syndrome; degenerative diseases e.g. encephalopathy, dementia,
XX Alzheimer's disease, Parkinson's disease, neuropathy, cardiomyopathy,
XX aging, Kearn's Sayre syndrome, retinitis pigmentosa, ataxia, seizures,
XX proximal muscle weakness, Leber's hereditary optic neuropathy, optic
XX neuritis, and radiation damage; neoplasia, e.g. lympho-proliferative
XX diseases, lymphomas, Kaposi's sarcoma, pancreatic cancer, neuroblastoma,
XX leukemia, bladder carcinoma, breast cancer, skin cancer, lung cancer, and
XX colon cancer; and skin diseases, e.g. molluscum contagiosum, bacillary
XX angiomatosis, seborrheic dermatitis, psoriasis, Reiter's syndrome, insect
XX bite reaction, Staphylococcal folliculitis, Eosinophilic folliculitis. In
XX addition a drug resistance can be treated via administering the nucleic
XX acid components of defibrotide and the variants in combination with the
XX drug, e.g. a protease inhibitor
XX Sequence 19 BP; 11 A; 3 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2814 TGTATATGATATATAT 2829
DB 19 TGTATATGATATATTT 4

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| XX | PN | WO200129262-A2. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|----|-----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

Db 3 CAACUGUGAAGGAG 18
RESULT 1973
ADE65701/C
ID ADE65701 standard; RNA; 19 BP.
XX
AC ADE65701;
XX
XX
XX
XX 29-JAN-2004 (first entry)
DE Human c-fos siRNA lower strand, SEQ ID NO:156.
XX
XX RNA interference; short interfering nucleic acid; siRNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping;
KW central nervous system disorder; Alzheimer's disease;
KW Parkinson's disease; Huntington's disease; epilepsy; dementia;
KW amyotrophic lateral sclerosis; cancer; proliferative disease; restenosis;
KW polycystic kidney disease; inflammatory disease; allergic disease;
KW viral infection; HIV infection; autoimmune disease; transplant rejection;
KW vasotropic; neotropic; antiparkinsonian; neuroprotective; cytostatic;
KW antiinflammatory; antiallergic; virucide; anti-HIV; immunosuppressive;
KW anticonvulsant; nephrotropic; human; c-fos; ss.
XX
XX Homo sapiens.
OS
XX
XX WO2003070914-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 03-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
PA
XX
XX Mcswiggen J, Beigelman L;
PI
XX WPI; 2003-679877/64.
XX
XX New short interfering nucleic acid downregulates expression of the c-fos
PT gene useful for treatment and diagnosis of diseases, e.g. cancer and
PT inflammation.
XX
XX Example 3; SEQ ID NO 156; 145pp; English.
XX
XX The invention relates to short interfering nucleic acids (siRNA) which
XX downregulate expression of the human c-fos gene by RNA interference. The
XX siRNAs may or may not comprise ribonucleotides and may be double or single
XX stranded. They further comprise sense and antisense regions, or
XX alternatively are assembled from a sense oligonucleotide and an antisense
XX oligonucleotide. Specifically, the siRNAs include short interfering RNA
XX (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA
XX (shRNA). The siRNAs can be unmodified or chemically modified, can contain
XX deoxyribonucleotides, and can be chemically synthesised, expressed from a
XX vector or enzymatically synthesised. The invention also relates to kits
XX for the in vitro or in vivo delivery of siRNA; conjugates and/or complexes
XX of siRNA; and vectors that express siRNA. The siRNAs are used to modulate
XX expression of the c-fos gene in cells, tissue explants or organisms
XX (e.g., by ex vivo gene therapy), or in grafts and transplants for the
XX treatment of a variety of conditions. They may be used for treating
XX central nervous system lesions and injuries (e.g., Alzheimer's disease,
XX Parkinson's disease, Huntington's disease, epilepsy, dementia or
XX amyotrophic lateral sclerosis); various cancers; other proliferative

CC diseases (e.g., restenosis and polycystic kidney disease); inflammatory
CC and/or allergic diseases; viral infections (including HIV infection);
CC autoimmune diseases; and transplant rejection. The siRNAs are also useful
CC for drug screening, diagnosis, therapeutic target identification and
CC validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the lower strand of a human c-fos-
CC targeted double-stranded siRNA.
XX
XX Sequence 19 BP; 2 A; 6 C; 5 G; 0 T; 6 U; 0 Other;
SQ
Query Match 0.4%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. NO. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1887 CAAGCTGCTGAAGGAG 1902
DB 17 CAACCTGCTGAAGGAG 2
RESULT 1974
ADE27318
ID ADE27318 standard; RNA; 19 BP.
XX
AC ADE27318;
XX
XX 29-JAN-2004 (first entry)
DE Stearoyl-CoA desaturase siRNA oligonucleotide SEQ ID NO:262.
XX
XX short interfering nucleic acid; siRNA; downregulation; inhibition; SCD;
KW stearyl-CoA desaturase; RNA interference; anorectic; anti-diabetic;
KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
KW atherosclerosis; cancer; viral infection; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX
XX Synthetic.
OS
XX WO2003070885-A2.
XX
XX 28-AUG-2003.
PD
XX 13-FEB-2003; 2003WO-US004317.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 03-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 20-SEP-2002; 2002US-0412304P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Mcswiggen J, Beigelman L, Thompson J;
PI
XX WPI; 2003-721687/68.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of obesity or diabetes, downregulates expression of the
PT stearyl-CoA desaturase gene.
XX
XX Example 3; SEQ ID NO 262; 139pp; English.
XX
XX The present invention describes a short interfering nucleic acid (siRNA)
CC that downregulates expression of the SCD (stearoyl-CoA desaturase) gene
CC by RNA interference. Also described: (1) modulating expression of SCD
CC genes in cells, tissue explants or organisms by introduction of siRNA; (2)
CC kits for in vitro or in vivo delivery of siRNA; (3) conjugates and/or
CC complexes of siRNA; and (4) vectors that express siRNA. SCD inhibiting
CC siRNAs have anorectic, anti-diabetic, antiarteriosclerotic, cytostatic and
CC virucide activities. The siRNAs can be used to modulate expression of SCD

CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
 CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
 CC They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents an SCD siRNA, which is
 CC used in the exemplification of the present invention.
 XX
 SQ Sequence 19 BP; 4 A; 5 C; 6 G; 0 T; 4 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 81.2%; Pred. No. 1.8e+03;
 Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 1190 TGACCTGGGCAAGCC 1205
 Db :||||:|||||
 3 UGACCCUGGCGAAGUC 18
 RESULT 1975
 ADE27608/C
 ID ADE27608 standard; RNA; 19 BP.
 XX
 AC ADE27608;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Stearoyl-CoA desaturase siRNA oligonucleotide SEQ ID NO:552.
 XX
 KW short interfering nucleic acid; siRNA; downregulation; inhibition; SCD;
 KW stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
 KW antiarteriosclerotic; cytosstatic; virucide; obesity; diabetes;
 KW atherosclerosis; cancer; viral infection; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX
 OS Synthetic.
 XX
 WO2003070885-A2.
 XX
 28-AUG-2003.
 XX
 PF 13-FEB-2003; 2003WO-US004317.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 20-SEP-2002; 2002US-0412304P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswiggen J, Beigelman L, Thompson J;
 XX
 WPI; 2003-721687/68.
 XX
 DR New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of obesity or diabetes, downregulates expression of the
 PT stearyl-CoA desaturase gene.
 XX
 PS Example 3; SEQ ID NO 552; 139pp; English.
 XX
 CC The present invention describes a short interfering nucleic acid (siRNA)
 CC that downregulates expression of the SCD (stearoyl-CoA desaturase) gene
 CC by RNA interference. Also described: (1) modulating expression of SCD
 CC genes in cells, tissue explants or organisms by introduction of siRNA; (2)
 CC kits for in vitro or in vivo delivery of siRNA; (3) conjugates and/or
 CC complexes of siRNA; and (4) vectors that express siRNA. SCD inhibiting
 CC siRNAs have anorectic, antidiabetic, antiarteriosclerotic, cytosstatic and
 CC virucide activities. The siRNAs can be used to modulate expression of SCD
 CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;

CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
 CC They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents an SCD siRNA, which is
 CC used in the exemplification of the present invention.
 XX
 SQ Sequence 19 BP; 4 A; 6 C; 5 G; 0 T; 4 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1190 TGACCTGGGCAAGCC 1205
 Db :||||:|||||
 17 TGACCTGGGCAAGTC 2
 RESULT 1976
 ADF37077/C
 ID ADF37077 standard; RNA; 19 BP.
 XX
 AC ADF37077;
 XX
 DT 12-FEB-2004 (first entry)
 XX
 DE Human VEGFR2 short interfering nucleic acid (siRNA) SEQ ID NO:1366.
 XX
 KW double-stranded short interfering nucleic acid;
 KW short interfering nucleic acid; siRNA; downregulation;
 KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
 KW cytosstatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
 KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
 KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
 KW arthritis; psoriasis; endometriosis; angiofibroma;
 KW polycystic kidney disease; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 WO2003070910-A2.
 XX
 28-AUG-2003.
 XX
 PF 20-FEB-2003; 2003WO-US005022.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 29-MAY-2002; 2002WO-US017674.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 03-JUL-2002; 2002US-0393796P.
 PR 29-JUL-2002; 2002US-0399348P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 04-NOV-2002; 2002US-00287949.
 PR 27-NOV-2002; 2002US-00306747.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswiggen J, Beigelman L, Pavco P;
 XX
 WPI; 2003-679876/64.
 XX
 DR New double-stranded interfering nucleic acid, useful e.g. for treatment
 PT and diagnosis of cancer, downregulates the vascular endothelial growth
 PT factor receptor gene.
 XX
 PS Example 3; SEQ ID NO 1366; 207pp; English.
 XX
 CC The present invention describes a double-stranded short interfering
 CC nucleic acid (siRNA) that downregulates expression of the vascular


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PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 04-NOV-2002; 2002US-00287949.
PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Pavco P;
XX WPI; 2003-679876/64.
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
XX
XX Example 3; SEQ ID NO 1981; 207pp; English.
XX
XX The present invention describes a double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the vascular
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
CC that express siNA; and (5) single-stranded siNA with similar properties.
CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
CC (downregulating) the expression of VEGFR genes. The siNA are potentially
CC useful for treating a wide range of angiogenesis-associated conditions,
CC particularly cancers, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
CC drug screening, target identification and validation, genetic
CC engineering, studying gene function, and also for gene mapping (e.g. of
CC single-nucleotide polymorphisms). The present sequence is used in the
CC exemplification of the present invention.
XX
XX Sequence 19 BP; 2 A; 7 C; 4 G; 0 T; 6 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.4; DB 1; Length 19;
XX Best Local Similarity 93.8%; Pred. No. 1.8e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 1998 CAAGCAGCTGGTGAG 2013
Db ||||| ||||| |||||
17 CAAGAAGCTGGTGAG 2

RESULT 1979
ADF36753
ID ADF36753 standard; RNA; 19 BP.
XX
XX ADF36753;
AC
XX
XX 12-FEB-2004 (first entry)
DT
XX Human VEGFR2 short interfering nucleic acid (siNA) SEQ ID NO:1042.
DE
XX
XX double-stranded short interfering nucleic acid;
KW short interfering nucleic acid; siNA; downregulation;
KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
KW cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
KW arthritis; psoriasis; endometriosis; angiofibroma;
KW polycystic kidney disease; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
OS
XX WO2003070910-A2.
PN
XX 28-AUG-2003.
PD

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XX 20-FEB-2003; 2003WO-US005022.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 29-MAY-2002; 2002WO-US017674.
PR 06-JUN-2002; 2002US-0386782P.
PR 03-JUL-2002; 2002US-0393796P.
PR 29-JUL-2002; 2002US-0399348P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 04-NOV-2002; 2002US-00287949.
PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Pavco P;
PI WPI; 2003-679876/64.
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
XX
XX Example 3; SEQ ID NO 1042; 207pp; English.
XX
XX The present invention describes a double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the vascular
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
CC that express siNA; and (5) single-stranded siNA with similar properties.
CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
CC gynaecological activities. The siNA are useful for modulating
CC (downregulating) the expression of VEGFR genes. The siNA are potentially
CC useful for treating a wide range of angiogenesis-associated conditions,
CC particularly cancers, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
CC drug screening, target identification and validation, genetic
CC engineering, studying gene function, and also for gene mapping (e.g. of
CC single-nucleotide polymorphisms). The present sequence is used in the
CC exemplification of the present invention.
XX
XX Sequence 19 BP; 6 A; 4 C; 6 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.4; DB 1; Length 19;
XX Best Local Similarity 81.2%; Pred. No. 1.8e+03;
XX Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
XX
QY 1609 AAGTGCATCCACAGG 1624
Db ||||| ||||| |||||
4 AAGUGAUCCACAGG 19

RESULT 1980
ADF48435
ID ADF48435 standard; RNA; 19 BP.
XX
XX ADF48435;
AC
XX
XX 12-FEB-2004 (first entry)
DT
XX Human Myb siNA lower strand, SEQ ID 572.
DE
XX
XX Human; Myc; Myb; cancer; proliferative disease; restenosis;
KW polycystic kidney disease; RNA interference;
KW short interfering nucleic acid; siNA; short interfering RNA; siRNA;
KW double-stranded RNA; micro-RNA; mRNA; short hairpin RNA; shRNA;
KW expression modulation; gene therapy; drug screening; diagnosis;

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KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; cytoskeletal; vasotropic;
KW nephrotropic; ss.

OS Homo sapiens.

PN WO2003070917-A2.

XX 28-AUG-2003.

XX 20-FEB-2003; 2003WO-US005326.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-OCT-2002; 2002US-0418655P.

XX 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689784/65.

XX New short interfering nucleic acid, useful e.g. for treatment and

XX diagnosis of cancer, downregulates expression of Myc or Myb genes.

XX Example 7; Page 135; 161pp; English.

XX The invention relates to short interfering nucleic acids (siRNA) which
CC downregulate expression of the human Myc or Myb genes by RNA
CC interference. The siRNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siRNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates
CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are
CC used to modulate expression of the Myc or Myb genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
CC used for treating cancers and other proliferative diseases, such as
CC restenosis and polycystic kidney disease. The siRNAs are also useful for
CC drug screening, diagnosis, therapeutic target identification and
CC validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the lower strand of a human Myb-targeted
CC double-stranded siRNA.

XX Sequence 19 BP; 11 A; 0 C; 0 G; 0 T; 8 U; 0 Other;

XX Query Match 0.4%; Score 14.4; DB 1; Length 19;
XX Best Local Similarity 50.0%; Pred. No. 1.8e+03;
XX Matches 8; Conservative 7; Mismatches 1; Indels 0; Gaps 0;

QY 2833 TATATATATATATACAT 2848

DB 1 UAUUAUUAUUAUU 16

RESULT 1981

ID ADF48256/c

XX ADF48256 standard; RNA; 19 BP.

AC ADF48256;

XX 12-FEB-2004 (first entry)

XX Human Myb transcript target sequence/siRNA upper strand, SEQ ID 393.
XX Human; Myc; Myb; cancer; proliferative disease; restenosis;
KW polycystic kidney disease; RNA interference;
KW short interfering nucleic acid; siRNA; short interfering RNA; siRNA;
KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
KW expression modulation; gene therapy; drug screening; diagnosis;
KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; cytoskeletal; vasotropic;
KW nephrotropic; ss.

XX Homo sapiens.

XX WO2003070917-A2.

XX 28-AUG-2003.

XX 20-FEB-2003; 2003WO-US005326.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-OCT-2002; 2002US-0418655P.

XX 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689784/65.

XX New short interfering nucleic acid, useful e.g. for treatment and

XX diagnosis of cancer, downregulates expression of Myc or Myb genes.

XX Example 7; Page 135; 161pp; English.

XX The invention relates to short interfering nucleic acids (siRNA) which
CC downregulate expression of the human Myc or Myb genes by RNA
CC interference. The siRNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siRNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates
CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are
CC used to modulate expression of the Myc or Myb genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
CC used for treating cancers and other proliferative diseases, such as
CC restenosis and polycystic kidney disease. The siRNAs are also useful for
CC drug screening, diagnosis, therapeutic target identification and
CC validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the upper strand of a human Myb-targeted
CC double-stranded siRNA, which is identical to the Myb transcript target
CC sequence.

XX Sequence 19 BP; 8 A; 0 C; 0 G; 0 T; 11 U; 0 Other;

XX Query Match 0.4%; Score 14.4; DB 1; Length 19;

XX Best Local Similarity 93.8%; Pred. No. 1.8e+03;

XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2833 TATATATATATATACAT 2848

DB 19 TATATATATATATAT 4

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RESULT 1982
ADF49401/c
ID ADF49401 standard; RNA; 19 BP.
XX
AC ADF49401;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human BCL2 siNA upper sequence SEQ ID NO:129.
XX
KW ss; siNA; human; BCL2; short interfering nucleic acid; RNA interference;
KW cytostatic; immunosuppressive; virucide; anti-HIV; cancer;
KW autoimmune disease; viral infection; HIV.
XX
OS Homo sapiens.
XX
PN WO2003070969-A2.
XX
PD 28-AUG-2003.
XX
PF 18-FEB-2003; 2003WO-US004908.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 18-JUL-2002; 2002US-0396905P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-712622/67.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer or autoimmune disease, downregulates expression of
PT the BCL2 gene.
XX
PS Example 3; SEQ ID NO 129; 148pp; English.
XX
CC The invention relates to a novel short interfering nucleic acid (siNA)
CC that downregulates expression of the BCL2 gene by RNA interference. A
CC siNA of the invention has cytostatic, immunosuppressive, virucide, and
CC anti-HIV activity. The siNA are useful for modulation (inhibition) of
CC expression or activity of BCL2 by RNA interference. siNA are used to
CC modulate expression of BCL2 genes, in cells, tissue explants or
CC organisms, e.g. for treating cancer, autoimmune diseases and viral
CC infections (including by HIV) but also for drug screening, diagnosis,
CC target identification and validation, genetic engineering,
CC pharmacogenomics, studying gene function and gene mapping (e.g. of single
CC -nucleotide polymorphisms). The sequences shown in ADF49273-ADF50143
CC represent siNA of the invention.
XX
SQ Sequence 19 BP; 9 A; 7 C; 2 G; 0 T; 1 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2316 TCTGTGTGTGTGTGTG 2331
DB 19 TCTGTGTGTGTGTGTG 4
RESULT 1983
ADF49815
ID ADF49815 standard; RNA; 19 BP.
XX
AC ADF49815;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human BCL2 siNA upper sequence SEQ ID NO:543.
XX
KW ss; siNA; human; BCL2; short interfering nucleic acid; RNA interference;
KW cytostatic; immunosuppressive; virucide; anti-HIV; cancer;
KW autoimmune disease; viral infection; HIV.
XX
OS Homo sapiens.
XX
PN WO2003070969-A2.
XX
PD 28-AUG-2003.
XX
PF 18-FEB-2003; 2003WO-US004908.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 18-JUL-2002; 2002US-0396905P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-712622/67.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer or autoimmune disease, downregulates expression of
PT the BCL2 gene.
XX
PS Example 3; SEQ ID NO 543; 148pp; English.
XX
CC The invention relates to a novel short interfering nucleic acid (siNA)
CC that downregulates expression of the BCL2 gene by RNA interference. A
CC siNA of the invention has cytostatic, immunosuppressive, virucide, and
CC anti-HIV activity. The siNA are useful for modulation (inhibition) of
CC expression or activity of BCL2 by RNA interference. siNA are used to
CC modulate expression of BCL2 genes, in cells, tissue explants or
CC organisms, e.g. for treating cancer, autoimmune diseases and viral
CC infections (including by HIV) but also for drug screening, diagnosis,
CC target identification and validation, genetic engineering,
CC pharmacogenomics, studying gene function and gene mapping (e.g. of single
CC -nucleotide polymorphisms). The sequences shown in ADF49273-ADF50143
CC represent siNA of the invention.
XX
SQ Sequence 19 BP; 1 A; 2 C; 7 G; 0 T; 9 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 19;
Best Local Similarity 43.8%; Pred. No. 1.8e+03;
Matches 7; Conservative 8; Mismatches 1; Indels 0; Gaps 0;
QY 2316 TCTGTGTGTGTGTGTG 2331
DB 1 UCUGUCUGUGUGUGUG 16
RESULT 1984
ADF71353/c
ID ADF71353 standard; RNA; 19 BP.
XX
AC ADF71353;
XX
DT 12-FEB-2004 (first entry)
XX
DE Protein tyrosine phosphatase type IV (PRL3) gene siNA, SEQ ID NO 138.
XX
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KW short interfering nucleic acid; siNA;
 KW protein tyrosine phosphatase type IV; PRL3; RNA interference; cytostatic;
 KW cancer; ss.
 OS Homo sapiens.
 XX WO2003070886-A2.
 XX 28-AUG-2003.
 XX 11-FEB-2003; 2003WO-US004347.
 XX 20-FEB-2002; 2002US-0358580P.
 XX 11-MAR-2002; 2002US-0363124P.
 XX 06-JUN-2002; 2002US-0386782P.
 XX 29-AUG-2002; 2002US-0406784P.
 XX 05-SEP-2002; 2002US-0408378P.
 XX 09-SEP-2002; 2002US-0409293P.
 XX 15-JAN-2003; 2003US-0440129P.
 XX (RIBO-) RIBOZYME PHARM INC.
 XX Mcswiggen J, Beigelman L, Usman N;
 XX WPI; 2003-697606/66.
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of a protein tyrosine
 PT phosphatase type IVa gene.
 XX Example 3; SEQ ID NO 138; 131pp; English.
 XX The invention relates to a novel short interfering nucleic acid (siNA)
 CC that downregulates expression of a protein tyrosine phosphatase type IV
 CC (PRL3) gene by RNA interference. The invention further relates to
 CC modulating the expression of PRL3 genes in cells, tissue explants or
 CC organisms by the introduction of an siNA; kits for in vitro or in vivo
 CC delivery of an siNA; conjugates and/or complexes of siNA; and vectors
 CC that express siNA. The novel siNA's of the invention have cytostatic
 CC activity. siNA's are used to modulate expression of PRL3 genes, in cells,
 CC tissue explants or organisms, e.g. for treating cancer but also for drug
 CC screening; diagnosis; target identification and validation; genetic
 CC engineering; pharmacogenomics; studying gene function and gene mapping
 CC (e.g. of single-nucleotide polymorphisms). This polynucleotide sequence
 CC represents a short interfering nucleic acid for downregulating the
 CC expression of a protein tyrosine phosphatase type IV (PRL3) gene of the
 CC invention.
 XX Sequence 19 BP; 1 A; 2 C; 13 G; 0 T; 3 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2592 CGGCCCTCCACACC 2607
 DB 18 CGGCCCTCCACACC 3
 RESULT 1985
 ADF71279
 ID ADF71279 standard; RNA; 19 BP.
 XX ADF71279;
 XX 12-FEB-2004 (first entry)
 DT Protein tyrosine phosphatase type IV (PRL3) gene siNA, SEQ ID NO 64.
 DE short interfering nucleic acid; siNA;
 XX short interfering nucleic acid; siNA;
 KW protein tyrosine phosphatase type IV; PRL3; RNA interference; cytostatic;
 KW cancer; ss.
 KW target sequence; ss.

OS Homo sapiens.
 XX WO2003070886-A2.
 XX 28-AUG-2003.
 XX 11-FEB-2003; 2003WO-US004347.
 XX 20-FEB-2002; 2002US-0358580P.
 XX 11-MAR-2002; 2002US-0363124P.
 XX 06-JUN-2002; 2002US-0386782P.
 XX 29-AUG-2002; 2002US-0406784P.
 XX 05-SEP-2002; 2002US-0408378P.
 XX 09-SEP-2002; 2002US-0409293P.
 XX 15-JAN-2003; 2003US-0440129P.
 XX (RIBO-) RIBOZYME PHARM INC.
 XX Mcswiggen J, Beigelman L, Usman N;
 XX WPI; 2003-697606/66.
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of a protein tyrosine
 PT phosphatase type IVa gene.
 XX Example 3; SEQ ID NO 64; 131pp; English.
 XX The invention relates to a novel short interfering nucleic acid (siNA)
 CC that downregulates expression of a protein tyrosine phosphatase type IV
 CC (PRL3) gene by RNA interference. The invention further relates to
 CC modulating the expression of PRL3 genes in cells, tissue explants or
 CC organisms by the introduction of an siNA; kits for in vitro or in vivo
 CC delivery of an siNA; conjugates and/or complexes of siNA; and vectors
 CC that express siNA. The novel siNA's of the invention have cytostatic
 CC activity. siNA's are used to modulate expression of PRL3 genes, in cells,
 CC tissue explants or organisms, e.g. for treating cancer but also for drug
 CC screening; diagnosis; target identification and validation; genetic
 CC engineering; pharmacogenomics; studying gene function and gene mapping
 CC (e.g. of single-nucleotide polymorphisms). This polynucleotide sequence
 CC represents a short interfering nucleic acid for downregulating the
 CC expression of a protein tyrosine phosphatase type IV (PRL3) gene of the
 CC invention.
 XX Sequence 19 BP; 3 A; 13 C; 2 G; 0 T; 1 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 87.5%; Pred. No. 1.8e+03;
 Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 2592 CGGCCCTCCACACC 2607
 DB 2 CGGCCCTCCACACC 17
 RESULT 1986
 ADF54219/c
 ID ADF54219 standard; RNA; 19 BP.
 XX ADF54219;
 XX 12-FEB-2004 (first entry)
 DT Human GAB2 short interfering nucleic acid upper sequence SEQ ID NO:292.
 DE RNA interference; short interfering nucleic acid; siNA;
 XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;
 KW drug screening; diagnosis; therapeutic target identification;
 KW pharmacogenomics; gene function analysis; gene mapping; human;
 KW GRB2-associated binding protein; GAB2; cancer; inflammation; allergy;
 KW chromosome 11; cytostatic; antiinflammatory; antiallergic;
 KW target sequence; ss.

XX OS Synthetic.
 OS Homo sapiens.
 XX WO2003070903-A2.
 XX PD 28-AUG-2003.
 XX PF 18-FEB-2003; 2003WO-US004909.
 XX PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX PA (RIBO-) RIBOZYME PHARM INC.
 XX PI Mcswiggen J, Beigelman L, Usman N;
 XX DR WPI; 2003-697611/66.
 XX PT New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of the GRB2-associated
 PT binding protein gene.
 XX PS Example 3; SEQ ID NO 292; 140pp; English.
 XX CC The present invention relates to short interfering nucleic acids (siNA)
 CC which downregulate expression of the human GRB2-associated binding
 CC protein (GAB2) gene by RNA interference. The siNAs may or may not
 CC comprise ribonucleotides and may be double or single stranded. They
 CC further comprise sense and antisense regions, or alternatively are
 CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
 CC Specifically, the siNAs include short interfering RNA (siRNA), double-
 CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
 CC can be unmodified or chemically modified, can contain
 CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
 CC vector or enzymatically synthesised. The invention also relates to kits
 CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
 CC of siNA; and vectors that express siNA. The siNAs are used to modulate
 CC expression of the GAB2 gene in cells, tissue explants or organisms (e.g.,
 CC by ex vivo gene therapy), or in grafts and transplants for the treatment
 CC of a variety of conditions. They may be used for treating cancer,
 CC inflammation and allergies. The siNAs are also useful for drug screening,
 CC diagnosis, therapeutic target identification and validation, genetic
 CC engineering, pharmacogenomics, studying gene function, and gene mapping
 CC (e.g., of single nucleotide polymorphisms). The human GAB2 gene is
 CC located on chromosome 11, more specifically to region 11q13.4. The human
 CC GAB2 siNAs have cytostatic, antiinflammatory and antiallergic activities.
 CC The present sequence represents the upper strand of a human GAB2-targeted
 CC double-stranded siNA, which is identical to the GAB2 transcript target
 CC sequence.
 XX SQ Sequence 19 BP; 3 A; 4 C; 8 G; 0 T; 4 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1992 CACCTTCACGACGCTG 2007
 Db 19 CCCCCCTTCACGACGCTG 4
 RESULT 1987
 ADF54555
 ID ADF54555 standard; RNA; 19 BP.
 XX AC ADF54555;
 XX

DT 12-FEB-2004 (first entry)
 DE Human GAB2 short interfering nucleic acid lower sequence SEQ ID NO:628.
 XX RNA interference; short interfering nucleic acid; siNA;
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;
 KW drug screening; diagnosis; therapeutic target identification;
 KW pharmacogenomics; gene function analysis; gene mapping; human;
 KW GRB2-associated binding protein; GAB2; cancer; inflammation; allergy;
 KW chromosome 11; cytostatic; antiinflammatory; antiallergic; ss.
 XX OS Synthetic.
 OS Homo sapiens.
 XX WO2003070903-A2.
 XX PD 28-AUG-2003.
 XX PF 18-FEB-2003; 2003WO-US004909.
 XX PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX PA (RIBO-) RIBOZYME PHARM INC.
 XX PI Mcswiggen J, Beigelman L, Usman N;
 XX DR WPI; 2003-697611/66.
 XX PT New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of the GRB2-associated
 PT binding protein gene.
 XX PS Example 3; SEQ ID NO 628; 140pp; English.
 XX CC The present invention relates to short interfering nucleic acids (siNA)
 CC which downregulate expression of the human GRB2-associated binding
 CC protein (GAB2) gene by RNA interference. The siNAs may or may not
 CC comprise ribonucleotides and may be double or single stranded. They
 CC further comprise sense and antisense regions, or alternatively are
 CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
 CC Specifically, the siNAs include short interfering RNA (siRNA), double-
 CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
 CC can be unmodified or chemically modified, can contain
 CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
 CC vector or enzymatically synthesised. The invention also relates to kits
 CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
 CC of siNA; and vectors that express siNA. The siNAs are used to modulate
 CC expression of the GAB2 gene in cells, tissue explants or organisms (e.g.,
 CC by ex vivo gene therapy), or in grafts and transplants for the treatment
 CC of a variety of conditions. They may be used for treating cancer,
 CC inflammation and allergies. The siNAs are also useful for drug screening,
 CC diagnosis, therapeutic target identification and validation, genetic
 CC engineering, pharmacogenomics, studying gene function, and gene mapping
 CC (e.g., of single nucleotide polymorphisms). The human GAB2 gene is
 CC located on chromosome 11, more specifically to region 11q13.4. The human
 CC GAB2 siNAs have cytostatic, antiinflammatory and antiallergic activities.
 CC The present sequence represents the lower strand of a human GAB2-targeted
 CC double-stranded siNA.
 XX SQ Sequence 19 BP; 4 A; 8 C; 4 G; 0 T; 3 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 75.0%; Pred. No. 1.8e+03;
 Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 1992 CACCTTCACGACGCTG 2007

DB 1 |||:|||||:|
1 CCCCUACAGCAGCUG 16

RESULT 1988
ADF93340
ID ADF93340 standard; RNA; 19 BP.
XX
AC ADF93340;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human TERT transcript target sequence/siNA upper strand, SEQ ID 57.
XX
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
KW antarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
KW RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.
XX
OS Homo sapiens.
PN WO2003070742-A1.
XX
PD 28-AUG-2003.
XX
PF 11-FEB-2003; 2003WO-US004088.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 17-JUL-2002; 2002US-0396600P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
XX WPI; 2003-689777/65.
XX
DR New short interfering nucleic acid downregulates expression of the
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
PS Example 3; SEQ ID NO 57; 145pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the one or more telomerase genes by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the telomerase genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
CC used for treating cancer, restenosis, infectious diseases (specifically
CC protozoal), transplant rejection, or autoimmune or age-related diseases,
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
CC screening, diagnosis, therapeutic target identification and validation, and
CC genetic engineering, pharmacogenomics, studying gene function, and gene
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence

CC represents the upper strand of a human TERT-targeted double-stranded
CC siNA, which is identical to the c-fos transcript target sequence.
XX
SQ Sequence 19 BP; 1 A; 3 C; 13 G; 0 T; 2 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 19;
Best Local Similarity 87.5%; Pred. No. 1.8e+03;
Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 2920 GGGCGGGCGGTGGGG 2935
DB | |||||:|||||
2 GAGCGGGCGGCGGGG 17

RESULT 1989
ADF93594/c
ID ADF93594 standard; RNA; 19 BP.
XX
AC ADF93594;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human TERT siNA lower strand, SEQ ID 321.
XX
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
KW antarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
KW RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.
XX
OS Homo sapiens.
XX
PN WO2003070742-A1.
XX
PD 28-AUG-2003.
XX
PF 11-FEB-2003; 2003WO-US004088.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 17-JUL-2002; 2002US-0396600P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
XX WPI; 2003-689777/65.
XX
PT New short interfering nucleic acid downregulates expression of the
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
PS Example 3; SEQ ID NO 321; 145pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the one or more telomerase genes by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the telomerase genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
CC used for treating cancer, restenosis, infectious diseases (specifically
CC protozoal), transplant rejection, or autoimmune or age-related diseases,
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
CC screening, diagnosis, therapeutic target identification and validation, and
CC genetic engineering, pharmacogenomics, studying gene function, and gene
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence

XX Sequence 19 BP; 2 A; 2 C; 8 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.4%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2101 GACAGCCCCAGTCCA 2116
DB 19 GACATCCCCAGTCCA 4
RESULT 1992
ADL99953
ID ADL99953 standard; RNA; 19 BP.
XX
AC ADL99953;
XX
XX 20-MAY-2004 (first entry)
XX Hepatitis B virus short interfering nucleic acid (siNA) #370.
DE Virucide; Hepatotropic; Gene therapy; ss; short interfering nucleic acid;
KW siNA; hepatitis B virus; HBV; RNA interference.
XX
XX Hepatitis B virus.
OS
XX
XX US2003206887-A1.
PN
XX
XX 06-NOV-2003.
PD
XX
XX 16-SEP-2002; 2002US-00244647.
PF
XX
XX 14-MAY-1992; 92US-00882712.
PR
XX 07-FEB-1994; 94US-00193627.
PR
XX 08-NOV-1999; 99US-00436430.
PR
XX 20-MAR-2000; 2000US-00531025.
PR
XX 09-AUG-2000; 2000US-00636385.
PR
XX 24-OCT-2000; 2000US-00696347.
PR
XX 08-JUN-2001; 2001US-00877478.
PR
XX 08-JUN-2001; 2001US-0296876P.
PR
XX 26-MAR-2002; 2002US-0363124P.
PR
XX 06-JUN-2002; 2002US-0386782P.
PR
XX 29-AUG-2002; 2002US-0406784P.
PR
XX 05-SEP-2002; 2002US-0408378P.
PR
XX 09-SEP-2002; 2002US-0409293P.
XX
XX (MORRISSEY D.
PA (MCSWIGEN J A.
PA (BEIGELMAN L.
XX
XX Morrissey D, Mcswiggen JA, Beigelman L;
PI
XX
XX WPI; 2003-901032/82.
XX
XX New short interfering nucleic acid molecules which down-regulates
PT expression of a hepatitis B virus (HBV) or which inhibits HBV
PT replication, useful for treating human HBV infections or for
PT characterizing gene function.
XX
XX Claim 11; Page 46; 72pp; English.
PS
XX
XX The invention relates to a short interfering nucleic acid (siNA) molecule
CC that down-regulates expression of a hepatitis B virus (HBV) gene by RNA
CC interference or that inhibits HBV replication. Also disclosed are the
CC following: (i) a method of modulating the expression of a HBV gene in a
CC tissue explant; (ii) a method of generating a library of siNA constructs
CC having predetermined complexity; (iii) a cell containing one or more siNA
CC molecules; (iv) a kit containing a siNA molecule which can be used to

CC modulate the expression of a HBV target gene in a cell, tissue or
CC organism; and (v) a method for synthesizing a siNA molecule. The siNA
CC molecule is adapted for use to treat HBV infection, and comprises a sense
CC and an antisense region, where the antisense region comprises a sequence
CC complementary to an RNA sequence encoding HBV and the sense region
CC comprises a sequence complementary to the antisense region. The siNA
CC molecule is assembled from 2 nucleic acid fragments, where one fragment
CC comprises the sense region and the second acid fragment comprises the
CC antisense region of the siNA molecule, where sense region and the
CC antisense region comprise separate oligonucleotides, and are covalently
CC connected via a linker molecule. The linker molecule is a polynucleotide
CC linker or a non-nucleotide linker. The sense region comprises a 3'-
CC terminal overhang and the antisense region comprises a 3'-terminal
CC overhang. The 3'-terminal overhangs each comprise about 2 nucleotides.
CC The antisense region 3'-terminal overhang is complementary to RNA
CC encoding HBV. The siNA is useful for treating human hepatitis B virus
CC infections, and for characterising pathways of gene function, e.g. to
CC inhibit activity of target genes in a pathway to determine the function
CC of uncharacterised genes in gene function analysis. The siNA molecules
CC may also be used in clinical, industrial, environmental, agricultural
CC and/or research settings. The present sequence represents 1 of 1504 HBV
CC siNA molecules of the invention.
XX
XX Sequence 19 BP; 5 A; 5 C; 3 G; 0 T; 6 U; 0 Other;
SQ Query Match 0.4%; Score 14.4; DB 1; Length 19;
Best Local Similarity 62.5%; Pred. No. 1.8e+03;
Matches 10; Conservative 5; Mismatches 1; Indels 0; Gaps 0;
QY 2776 TTCGGAACCTAGTGT 2791
DB 3 UUCGGAACUACUGU 18
RESULT 1993
ADL99963
ID ADL99963 standard; RNA; 19 BP.
XX
XX ADL99963;
AC
XX 20-MAY-2004 (first entry)
DT
XX
XX Hepatitis B virus short interfering nucleic acid (siNA) #380.
DE Virucide; Hepatotropic; Gene therapy; ss; short interfering nucleic acid;
KW siNA; hepatitis B virus; HBV; RNA interference.
XX
XX Hepatitis B virus.
OS
XX
XX US2003206887-A1.
PN
XX
XX 06-NOV-2003.
PD
XX
XX 16-SEP-2002; 2002US-00244647.
PF
XX
XX 14-MAY-1992; 92US-00882712.
PR
XX 07-FEB-1994; 94US-00193627.
PR
XX 08-NOV-1999; 99US-00436430.
PR
XX 20-MAR-2000; 2000US-00531025.
PR
XX 09-AUG-2000; 2000US-00636385.
PR
XX 24-OCT-2000; 2000US-00696347.
PR
XX 08-JUN-2001; 2001US-00877478.
PR
XX 08-JUN-2001; 2001US-0296876P.
PR
XX 24-OCT-2001; 2001US-0335059P.
PR
XX 05-DEC-2001; 2001US-0337055P.
PR
XX 20-FEB-2002; 2002US-0358580P.
PR
XX 11-MAR-2002; 2002US-0363124P.
PR
XX 26-MAR-2002; 2002US-0386782P.
PR
XX 29-AUG-2002; 2002US-0406784P.
PR
XX 05-SEP-2002; 2002US-0408378P.
PR
XX 09-SEP-2002; 2002US-0409293P.
XX

QY 2776 TTCCGGAAACTAGTGT 2791
 Db 16 TTCCGGAAACTAGTGT 1
 RESULT 1995
 ADM00641/c
 ID ADM00641 standard; RNA; 19 BP.
 XX ADM00641;
 XX 20-MAY-2004 (first entry)
 DT Hepatitis B virus short interfering nucleic acid (siNA) #1057.
 DE Virucide; Hepatotropic; Gene therapy; ss; short interfering nucleic acid;
 KW siNA; hepatitis B virus; HBV; RNA interference.
 XX Hepatitis B virus.
 OS Hepatitis B virus.
 PN US2003206887-A1.
 XX 06-NOV-2003.
 PD 16-SEP-2002; 2002US-00244647.
 PF 14-MAY-1992; 92US-00882712.
 PR 07-FEB-1994; 94US-00193627.
 PR 08-NOV-1999; 99US-00436430.
 PR 20-MAR-2000; 2000US-00531025.
 PR 09-AUG-2000; 2000US-00636385.
 PR 24-OCT-2000; 2000US-00696347.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 26-MAR-2002; 2002US-0386782P.
 PR 06-JUN-2002; 2002US-0406784P.
 PR 29-AUG-2002; 2002US-0408378P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 XX (MORR/) MORRISSEY D.
 PA (MCSW/) MCSWIGGEN J A.
 PA (BEIG/) BEIGELMAN L.
 XX Morrissey D, Mcswiggen JA, Beigelman L;
 WPI; 2003-901032/82.
 XX New short interfering nucleic acid molecules which down-regulates
 PT expression of a hepatitis B virus (HBV) or which inhibits HBV
 PT replication, useful for treating human HBV infections or for
 PT characterizing gene function.
 XX Claim 11; Page 46; 72pp; English.
 XX The invention relates to a short interfering nucleic acid (siNA) molecule
 CC that down-regulates expression of a hepatitis B virus (HBV) gene by RNA
 CC interference or that inhibits HBV replication. Also disclosed are the
 CC following: (i) a method of modulating the expression of a HBV gene in a
 CC tissue explant; (ii) a method of generating a library of siNA constructs
 CC having predetermined complexity; (iii) a cell containing one or more siNA
 CC molecules; (iv) a kit containing a siNA molecule which can be used to
 CC modulate the expression of a HBV target gene in a cell, tissue or
 CC organism; and (v) a method for synthesising a siNA molecule. The siNA
 CC molecule is adapted for use to treat HBV infection, and comprises a sense
 CC and an antisense region, where the antisense region comprises a sense
 CC complementary to an RNA sequence encoding HBV and the sense region
 CC comprises sequence complementary to the antisense region. The siNA
 CC molecule is assembled from 2 nucleic acid fragments, where one fragment

CC comprises the sense region and the second fragment comprises the
 CC antisense region of the siNA molecule, where sense region and the
 CC antisense region comprise separate oligonucleotides, and are covalently
 CC connected via a linker molecule. The linker molecule is a polynucleotide
 CC linker or a non-nucleotide linker. The sense region comprises a 3'-
 CC terminal overhang and the antisense region comprises a 3'-terminal
 CC overhang. The 3'-terminal overhangs each comprise about 2 nucleotides.
 CC The antisense region 3'-terminal overhang is complementary to RNA
 CC encoding HBV. The siNA is useful for treating human hepatitis B virus
 CC infections, and for characterising pathways of gene function, e.g. to
 CC inhibit activity of target genes in a pathway to determine the function
 CC of uncharacterised genes in gene function analysis. The siNA molecules
 CC may also be used in clinical, industrial, environmental, agricultural
 CC and/or research settings. The present sequence represents 1 of 1504 HBV
 CC siNA molecules of the invention.
 XX Sequence 19 BP; 7 A; 4 C; 4 G; 0 T; 4 U; 0 Other;
 SQ Query Match 0.4%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2776 TTCCGGAAACTAGTGT 2791
 Db 19 TTCCGGAAACTAGTGT 4
 RESULT 1996
 ADL99998
 ID ADL99998 standard; RNA; 19 BP.
 XX AC ADL99998;
 XX 20-MAY-2004 (first entry)
 DT Hepatitis B virus short interfering nucleic acid (siNA) #415.
 DE Virucide; Hepatotropic; Gene therapy; ss; short interfering nucleic acid;
 KW siNA; hepatitis B virus; HBV; RNA interference.
 XX Hepatitis B virus.
 OS US2003206887-A1.
 PN 06-NOV-2003.
 PD 16-SEP-2002; 2002US-00244647.
 PF 14-MAY-1992; 92US-00882712.
 PR 07-FEB-1994; 94US-00193627.
 PR 08-NOV-1999; 99US-00436430.
 PR 20-MAR-2000; 2000US-00531025.
 PR 09-AUG-2000; 2000US-00636385.
 PR 24-OCT-2000; 2000US-00696347.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 26-MAR-2002; 2002US-0386782P.
 PR 06-JUN-2002; 2002US-0406784P.
 PR 29-AUG-2002; 2002US-0408378P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 XX (MORR/) MORRISSEY D.
 PA (MCSW/) MCSWIGGEN J A.
 PA (BEIG/) BEIGELMAN L.
 XX Morrissey D, Mcswiggen JA, Beigelman L;
 WPI; 2003-901032/82.
 XX New short interfering nucleic acid molecules which down-regulates
 PT expression of a hepatitis B virus (HBV) or which inhibits HBV
 PT replication, useful for treating human HBV infections or for
 PT characterizing gene function.
 XX Claim 11; Page 46; 72pp; English.
 XX The invention relates to a short interfering nucleic acid (siNA) molecule
 CC that down-regulates expression of a hepatitis B virus (HBV) gene by RNA
 CC interference or that inhibits HBV replication. Also disclosed are the
 CC following: (i) a method of modulating the expression of a HBV gene in a
 CC tissue explant; (ii) a method of generating a library of siNA constructs
 CC having predetermined complexity; (iii) a cell containing one or more siNA
 CC molecules; (iv) a kit containing a siNA molecule which can be used to
 CC modulate the expression of a HBV target gene in a cell, tissue or
 CC organism; and (v) a method for synthesising a siNA molecule. The siNA
 CC molecule is adapted for use to treat HBV infection, and comprises a sense
 CC and an antisense region, where the antisense region comprises a sense
 CC complementary to an RNA sequence encoding HBV and the sense region
 CC comprises sequence complementary to the antisense region. The siNA
 CC molecule is assembled from 2 nucleic acid fragments, where one fragment

XX New short interfering nucleic acid molecules which down-regulates
PT expression of a hepatitis B virus (HBV) or which inhibits HBV
PT replication, useful for treating human HBV infections or for
PT characterizing gene function.
XX Claim 11; Page 46; 72pp; English.
XX The invention relates to a short interfering nucleic acid (siNA) molecule
CC that down-regulates expression of a hepatitis B virus (HBV) gene by RNA
CC interference or that inhibits HBV replication. Also disclosed are the
CC following: (i) a method of modulating the expression of a HBV gene in a
CC tissue explant; (ii) a method of generating a library of siNA constructs
CC having predetermined complexity; (iii) a cell containing one or more siNA
CC molecules; (iv) a kit containing a siNA molecule which can be used to
CC modulate the expression of a HBV target gene in a cell, tissue or
CC organism; and (v) a method for synthesizing a siNA molecule. The siNA
CC molecule is adapted for use to treat HBV infection, and comprises a sense
CC and an antisense region, where the antisense region comprises sequence
CC complementary to an RNA sequence encoding HBV and the sense region
CC comprises sequence complementary to the antisense region. The siNA
CC molecule is assembled from 2 nucleic acid fragments, where one fragment
CC comprises the sense region and the second fragment comprises the
CC antisense region of the siNA molecule, where sense region and the
CC antisense region comprise separate oligonucleotides, and are covalently
CC connected via a linker molecule. The linker molecule is a polynucleotide
CC linker or a non-nucleotide linker. The sense region comprises a 3'-
CC terminal overhang and the antisense region comprises a 3'-terminal
CC overhang. The 3'-terminal overhangs each comprise about 2 nucleotides.
CC The antisense region 3'-terminal overhang is complementary to RNA
CC encoding HBV. The siNA is useful for treating human hepatitis B virus
CC infections, and for characterizing pathways of gene function, e.g. to
CC inhibit activity of target genes in a pathway to determine the function
CC of uncharacterised genes in gene function analysis. The siNA molecules
CC may also be used in clinical, industrial, environmental, agricultural
CC and/or research settings. The present sequence represents 1 of 1504 HBV
CC siNA molecules of the invention.
XX Sequence 19 BP; 4 A; 5 C; 4 G; 0 T; 6 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.4; DB 1; Length 19;
XX Best Local Similarity 62.5%; Pred. No. 1.8e+03;
XX Matches 10; Conservative 5; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2776 TTCCGGAAGAACTAGTGT 2791
XX :|||:|||||:|:|:
XX Db 2 UUCCGGAACUACUGU 17
XX
XX RESULT 1997
XX ADM00645/C
XX ID ADM00645 standard; RNA; 19 BP.
XX AC ADM00645;
XX XX
XX 20-MAY-2004 (first entry)
XX DT
XX Hepatitis B virus short interfering nucleic acid (siNA) #1061.
XX DE
XX Virucide; Hepatotropic; Gene therapy; ss; short interfering nucleic acid;
XX KW siNA; hepatitis B virus; HBV; RNA interference.
XX OS
XX Hepatitis B virus.
XX XX
XX US2003206887-A1.
XX PN
XX 06-NOV-2003.
XX PD
XX 16-SEP-2002; 2002US-00244647.
XX PF
XX 14-MAY-1992; 92US-00882712.
XX PR 07-FEB-1994; 94US-00193627.
XX PR 08-NOV-1999; 99US-00436430.

PR 20-MAR-2000; 2000US-00531025.
PR 09-AUG-2000; 2000US-00636385.
PR 24-OCT-2000; 2000US-00696347.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 26-MAR-2002; 2002WO-US009187.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
XX (MORR/) MORRISSEY D.
PA (MCSW/) MCSWIGGEN J A.
PA (BEIG/) BEIGELMAN L.
XX
XX Morrissey D, Mcswiggen JA, Beigelman L;
PI WPI; 2003-901032/82.
XX
XX New short interfering nucleic acid molecules which down-regulates
PT expression of a hepatitis B virus (HBV) or which inhibits HBV
PT replication, useful for treating human HBV infections or for
PT characterizing gene function.
XX Claim 11; Page 46; 72pp; English.
XX
XX The invention relates to a short interfering nucleic acid (siNA) molecule
CC that down-regulates expression of a hepatitis B virus (HBV) gene by RNA
CC interference or that inhibits HBV replication. Also disclosed are the
CC following: (i) a method of modulating the expression of a HBV gene in a
CC tissue explant; (ii) a method of generating a library of siNA constructs
CC having predetermined complexity; (iii) a cell containing one or more siNA
CC molecules; (iv) a kit containing a siNA molecule which can be used to
CC modulate the expression of a HBV target gene in a cell, tissue or
CC organism; and (v) a method for synthesizing a siNA molecule. The siNA
CC molecule is adapted for use to treat HBV infection, and comprises a sense
CC and an antisense region, where the antisense region comprises sequence
CC complementary to an RNA sequence encoding HBV and the sense region
CC comprises sequence complementary to the antisense region. The siNA
CC molecule is assembled from 2 nucleic acid fragments, where one fragment
CC comprises the sense region and the second fragment comprises the
CC antisense region of the siNA molecule, where sense region and the
CC antisense region comprise separate oligonucleotides, and are covalently
CC connected via a linker molecule. The linker molecule is a polynucleotide
CC linker or a non-nucleotide linker. The sense region comprises a 3'-
CC terminal overhang and the antisense region comprises a 3'-terminal
CC overhang. The 3'-terminal overhangs each comprise about 2 nucleotides.
CC The antisense region 3'-terminal overhang is complementary to RNA
CC encoding HBV. The siNA is useful for treating human hepatitis B virus
CC infections, and for characterizing pathways of gene function, e.g. to
CC inhibit activity of target genes in a pathway to determine the function
CC of uncharacterised genes in gene function analysis. The siNA molecules
CC may also be used in clinical, industrial, environmental, agricultural
CC and/or research settings. The present sequence represents 1 of 1504 HBV
CC siNA molecules of the invention.
XX Sequence 19 BP; 6 A; 4 C; 5 G; 0 T; 4 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.4; DB 1; Length 19;
XX Best Local Similarity 93.8%; Pred. No. 1.8e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2776 TTCCGGAAGAACTAGTGT 2791
XX :|||:|||||:|:|:
XX Db 18 TTCCGGAAGAACTAGTGT 3
XX
XX RESULT 1998
XX ADL99994

ADL99994 standard; RNA; 19 BP.
 ADL99994;
 20-MAY-2004 (first entry)
 Hepatitis B virus short interfering nucleic acid (siNA) #411.
 Virucide; Hepatotropic; Gene therapy; ss; short interfering nucleic acid; siNA; hepatitis B virus; HBV; RNA interference.
 Hepatitis B virus.
 US2003206887-A1.
 06-NOV-2003.
 16-SEP-2002; 2002US-00244647.
 14-MAY-1992; 92US-00882712.
 07-FEB-1994; 94US-00193627.
 08-NOV-1999; 99US-00436430.
 20-MAR-2000; 2000US-00531025.
 09-AUG-2000; 2000US-00636385.
 24-OCT-2000; 2000US-00696347.
 08-JUN-2001; 2001US-00877478.
 08-JUN-2001; 2001US-0296876P.
 24-OCT-2001; 2001US-0335059P.
 05-DEC-2001; 2001US-0337055P.
 20-FEB-2002; 2002US-0358580P.
 11-MAR-2002; 2002US-0363124P.
 26-MAR-2002; 2002US-0386782P.
 06-JUN-2002; 2002US-0406784P.
 29-AUG-2002; 2002US-0408378P.
 05-SEP-2002; 2002US-0408378P.
 09-SEP-2002; 2002US-0409293P.
 (MORRISSEY D.
 (MCSWIGGEN J A.
 (BEIGELMAN L.
 Morrissey D, Mcswiggen JA, Beigelman L;
 WPI; 2003-901032/82.
 New short interfering nucleic acid molecules which down-regulate expression of a hepatitis B virus (HBV) or which inhibits HBV replication, useful for treating human HBV infections or for characterizing gene function.
 Claim 11; Page 46; 72pp; English.
 The invention relates to a short interfering nucleic acid (siNA) molecule that down-regulates expression of a hepatitis B virus (HBV) gene by RNA interference or that inhibits HBV replication. Also disclosed are the following: (i) a method of modulating the expression of a HBV gene in a tissue explant; (ii) a method of generating a library of siNA constructs having predetermined complexity; (iii) a cell containing one or more siNA molecules; (iv) a kit containing a siNA molecule which can be used to modulate the expression of a HBV target gene in a cell, tissue or organism; and (v) a method for synthesizing a siNA molecule. The siNA molecule is adapted for use to treat HBV infection, and comprises a sense and an antisense region, where the antisense region comprises sequence complementary to an RNA sequence encoding HBV and the sense region comprises sequence complementary to the antisense region. The siNA molecule is assembled from 2 nucleic acid fragments, where one fragment comprises the sense region and the second fragment comprises the antisense region of the siNA molecule, where sense region and the antisense region comprise separate oligonucleotides, and are covalently connected via a linker molecule. The linker molecule is a polynucleotide linker or a non-nucleotide linker. The sense region comprises a 3'-terminal overhang and the antisense region comprises a 3'-terminal overhang. The 3'-terminal overhangs each comprise about 2 nucleotides.

The antisense region 3'-terminal overhang is complementary to RNA encoding HBV. The siNA is useful for treating human hepatitis B virus infections, and for characterizing pathways of gene function, e.g. to inhibit activity of target genes in a pathway to determine the function of uncharacterised genes in gene function analysis. The siNA molecules may also be used in clinical, industrial, environmental, agricultural and/or research settings. The present sequence represents 1 of 1504 HBV siNA molecules of the invention.
 Sequence 19 BP; 4 A; 4 C; 4 G; 0 T; 7 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 62.5%; Pred. No. 1.8e+03;
 Matches 10; Conservative 5; Mismatches 1; Indels 0; Gaps 0;
 QY 2776 TTCGGAACACTAGTGT 2791
 Db 1 UCCGGAACUACUGU 16
 RESULT 1999
 ADM00600/c
 ID ADM00600 standard; RNA; 19 BP.
 XX
 AC ADM00600;
 XX
 DT 20-MAY-2004 (first entry)
 DE Hepatitis B virus short interfering nucleic acid (siNA) #1016.
 XX
 KW Virucide; Hepatotropic; Gene therapy; ss; short interfering nucleic acid; siNA; hepatitis B virus; HBV; RNA interference.
 OS Hepatitis B virus.
 XX
 PN US2003206887-A1.
 XX
 PD 06-NOV-2003.
 XX
 PF 16-SEP-2002; 2002US-00244647.
 XX
 PR 14-MAY-1992; 92US-00882712.
 PR 07-FEB-1994; 94US-00193627.
 PR 08-NOV-1999; 99US-00436430.
 PR 20-MAR-2000; 2000US-00531025.
 PR 09-AUG-2000; 2000US-00636385.
 PR 24-OCT-2000; 2000US-00696347.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 26-MAR-2002; 2002US-0386782P.
 PR 06-JUN-2002; 2002US-0406784P.
 PR 29-AUG-2002; 2002US-0408378P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 (MORRISSEY D.
 (MCSWIGGEN J A.
 (BEIGELMAN L.
 Morrissey D, Mcswiggen JA, Beigelman L;
 WPI; 2003-901032/82.
 New short interfering nucleic acid molecules which down-regulate expression of a hepatitis B virus (HBV) or which inhibits HBV replication, useful for treating human HBV infections or for characterizing gene function.
 Claim 11; Page 46; 72pp; English.

XX The invention relates to a short interfering nucleic acid (siNA) molecule
 CC that down-regulates expression of a hepatitis B virus (HBV) gene by RNA
 CC interference or that inhibits HBV replication. Also disclosed are the
 CC following: (i) a method of modulating the expression of a HBV gene in a
 CC tissue explant; (ii) a method of generating a library of siNA constructs
 CC having predetermined complexity; (iii) a cell containing one or more siNA
 CC molecules; (iv) a kit containing a siNA molecule which can be used to
 CC modulate the expression of a HBV target gene in a cell, tissue or
 CC organism; and (v) a method for synthesizing a siNA molecule. The siNA
 CC molecule is adapted for use to treat HBV infection, and comprises a sense
 CC and an antisense region, where the antisense region comprises sequence
 CC complementary to an RNA sequence encoding HBV and the sense region
 CC comprises sequence complementary to the antisense region. The siNA
 CC molecule is assembled from 2 nucleic acid fragments, where one fragment
 CC comprises the sense region and the second fragment comprises the
 CC antisense region of the siNA molecule, where sense region and the
 CC antisense region comprise separate oligonucleotides, and are covalently
 CC connected via a linker molecule. The linker molecule is a polynucleotide
 CC terminal overhang and the antisense region comprises a 3'-terminal
 CC overhang. The 3'-terminal overhangs each comprise about 2 nucleotides.
 CC The antisense region 3'-terminal overhang is complementary to RNA
 CC encoding HBV. The siNA is useful for treating human hepatitis B virus
 CC infections, and for characterizing pathways of gene function, e.g. to
 CC inhibit activity of target genes in a pathway to determine the function
 CC of uncharacterised genes in gene function analysis. The siNA molecules
 CC may also be used in clinical, industrial, environmental, agricultural
 CC and/or research settings. The present sequence represents 1 of 1504 HBV
 CC siNA molecules of the invention.

XX SQ Sequence 19 BP; 6 A; 3 C; 5 G; 0 T; 5 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2776 TTCGGAACTAGTGT 2791
 DB 17 TTCGGAACTACTGT 2

RESULT 2000
 ADL79493
 ID ADL79493 standard; RNA; 19 BP.
 XX AC ADL79493;
 XX 20-MAY-2004 (first entry)
 XX Human HER1 (EGFR) transcript target sequence/siNA upper strand, SEQ:658.
 XX RNA interference; short interfering nucleic acid; siNA;
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;
 KW drug screening; diagnosis; therapeutic target identification;
 KW pharmacogenomics; gene function analysis; gene mapping; cancer;
 KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
 KW HER1; c-erb-B-1; target sequence; ss.

XX OS Homo sapiens.
 XX PN WO2003070912-A2.
 XX 28-AUG-2003.
 XX 20-FEB-2003; 2003WO-US005045.
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 29-MAY-2002; 2002WO-US016840.
 PR 06-JUN-2002; 2002US-00163552.
 PR 06-JUN-2002; 2002US-0386782P.

PR 03-JUL-2002; 2002US-0393924P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 19-SEP-2002; 2002US-00251117.
 PR 21-OCT-2002; 2002US-00277494.
 PR 15-JAN-2003; 2003US-0440129P.
 PA (RIBO-) RIBOZYME PHARM INC.
 PI Mcswiggen J, Pavco P, Beigelman L, Fosaugh K, Jamison S;
 XX WPI; 2003-697612/66.
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of the epidermal growth
 PT factor receptor gene.
 XX Example 3; SEQ ID NO 658; 171pp; English.
 XX The invention relates to short interfering nucleic acids (siNA) which
 CC downregulate expression of one or more human epidermal growth factor
 CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA
 CC interference. The siNAs may or may not comprise ribonucleotides and may
 CC be double or single stranded. They further comprise sense and antisense
 CC regions, or alternatively are assembled from a sense oligonucleotide and
 CC an antisense oligonucleotide. Specifically, the siNAs include short
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
 CC can contain deoxyribonucleotides, and can be chemically synthesised,
 CC expressed from a vector or enzymatically synthesised. The invention also
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
 CC used to modulate expression of EGFR genes in cells, tissue explants or
 CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
 CC for the treatment of a variety of conditions. They may be used for
 CC treating a wide range of cancers such as breast and ovarian cancer. The
 CC siNAs are also useful for drug screening, diagnosis, therapeutic target
 CC identification and validation, genetic engineering, pharmacogenomics,
 CC studying gene function, and gene mapping (e.g., of single nucleotide
 CC polymorphisms). The present sequence represents the upper strand of a
 CC human HER1 (EGFR)-targeted double-stranded siNA, which is identical to
 CC the HER1 transcript target sequence.

XX SQ Sequence 19 BP; 4 A; 4 C; 7 G; 0 T; 4 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 75.0%; Pred. No. 1.8e+03;
 Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1794 CCAGAGTGACGTCTGG 1809
 DB 1 CCAGAGUGAUGUCUGG 16
 RESULT 2001
 ADL79800/c
 ID ADL79800 standard; RNA; 19 BP.
 XX AC ADL79800;
 XX 20-MAY-2004 (first entry)
 XX Human HER1 (EGFR) siNA lower strand, SEQ ID NO:965.
 XX RNA interference; short interfering nucleic acid; siNA;
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;
 KW drug screening; diagnosis; therapeutic target identification;
 KW pharmacogenomics; gene function analysis; gene mapping; cancer;
 KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
 KW HER1; c-erb-B-1; ss.

OS Homo sapiens.
XX WO2003070912-A2.
PN XX
XX
PD 28-AUG-2003.
XX
XX
PF 20-FEB-2003; 2003WO-US005045.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 11-MAR-2002; 2002WO-US016840.
PR 06-JUN-2002; 2002US-00163552.
PR 06-JUN-2002; 2002US-0366782P.
PR 03-JUL-2002; 2002US-0393924P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 19-SEP-2002; 2002US-00251117.
PR 21-OCT-2002; 2002US-00277494.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Pavco P, Beigelman L, Fosnaugh K, Jamison S;
PI WPI; 2003-697612/66.
XX
DR New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of the epidermal growth
PT factor receptor gene.
XX
XX Example 3; SEQ ID NO 965; 171pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of one or more human epidermal growth factor
CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise a sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of EGFR genes in cells, tissue explants or
CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
CC for the treatment of a variety of conditions. They may be used for
CC treating a wide range of cancers such as breast and ovarian cancer. The
CC siNAs are also useful for drug screening, diagnosis, therapeutic target
CC identification and validation, genetic engineering, pharmacogenomics,
CC studying gene function, and gene mapping (e.g., of single nucleotide
CC polymorphisms). The present sequence represents the lower strand of a
CC human HER1 (EGFR)-targeted double-stranded siNA.
XX
XX Sequence 19 BP; 4 A; 7 C; 4 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.4%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1794 CCAGAGTGAGCTCTGG 1809
DB 19 CCAGAGTGAGCTCTGG 4
RESULT 2002
ADM77315/C
ID ADM77315 standard; DNA; 19 BP.
XX
XX ADM77315;
XX

DT 03-JUN-2004 (first entry)
XX
XX Human fibrocystin (PKHD1) gene DHPLC PCR primer #23.
XX
KW human; fibrocystin;
KW treating autosomal recessive polycystic kidney disease; PKHD1; DHPLC PCR;
KW ss; primer.
XX
XX Homo sapiens.
OS
XX WO2003062453-A2.
PN
XX 31-JUL-2003.
PD
XX 23-JAN-2003; 2003WO-US002038.
PF
XX 23-JAN-2002; 2002US-0351110P.
XX
XX (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
PA
XX Harris PC, Ward CJ, Rossetti S, Torres VB;
PI WPI; 2003-618286/58.
DR
XX New isolated nucleic acid comprising a sequence encoding a fibrocystin
PT polypeptide, useful for diagnosing and treating autosomal recessive
PT polycystic kidney disease.
XX
XX Example 4; SEQ ID NO 70; 136pp; English.
PS
XX The invention comprises the amino acid and coding sequences of
CC fibrocystin proteins. The DNA and protein sequences of the invention are
CC useful for diagnosing and treating autosomal recessive polycystic kidney
CC disease. The present DNA sequence represents a DHPLC PCR primer that was
CC used to screen for mutations in the human fibrocystin (PKHD1) gene.
XX
XX Sequence 19 BP; 8 A; 9 C; 0 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2315 GTCCTGTGTGTGTGTGT 2330
DB 19 GTATGTGTGTGTGTGT 4
RESULT 2003
ADM41325
ID ADM41325 standard; DNA; 19 BP.
XX
XX ADM41325;
AC
XX 03-JUN-2004 (first entry)
DT
XX Human purine P2Y11 receptor forward PCR primer.
DE
XX P2Y11 receptor; receptor; human; antianaemic; cardiovascular-gen.;
KW CNS-gen.; respiratory-gen.; antiasthmatic; uropathic; antiinflammatory;
KW PCR; primer; ss.
XX
XX Homo sapiens.
OS
XX EP1398632-A1.
PN
XX 17-MAR-2004.
PD
XX 11-SEP-2002; 2002EP-00020415.
PF
XX 11-SEP-2002; 2002EP-00020415.
PR
XX (FARB) BAYER HEALTHCARE AG.
PA
XX

PI Kauschat D, Froehlen B;
 XX WPI; 2004-271670/26.
 XX
 XX Screening for therapeutic agents useful for the treatment and/or
 PT prophylaxis of, e.g. anemia; comprises detecting binding of test compound
 PT with polypeptide and selecting compounds which bind to the polypeptide as
 PT potential agents.
 XX
 XX Example 1; SEQ ID NO 17; 25pp; English.
 XX
 XX The present sequence is a forward primer for human P2Y11 receptor
 CC (P2Y11R) ADM41309. The forward primer, a reverse primer ADM41326 and
 CC probe ADM41327 were used in an example from the invention for expression
 CC profiling in human haematopoietic bone marrow cells. Higher expression of
 CC P2Y11R mRNA was observed in erythroid progenitor (CD71+) cells than in
 CC early progenitor (CD34+) cells. Expression decreased during
 CC differentiation from early progenitor cells to granulocytes in the bone
 CC marrow compartment. The invention is based on the finding of increased
 CC expression of P2Y11R mRNA in erythroid cells. It provides methods of
 CC using P2Y11R polypeptides to screen for agents useful in the treatment
 CC and/or prophylaxis of anaemia, especially pure red cell aplasia, anaemia
 CC of chronic renal failure, anaemia of endocrine disorders, congenital
 CC dyserythropoietic anaemia, iron deficiency, congenital atransferrinaemia
 CC and idiopathic pulmonary haemosiderosis (claimed), and for the treatment
 CC of haematological and cardiovascular diseases, disorders of the
 CC peripheral and central nervous system, chronic obstructive pulmonary
 CC disorder (COPD), asthma, genito-urological disorders and inflammation
 CC diseases.
 XX
 SQ Sequence 19 BP; 1 A; 2 C; 10 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3706 TCGTGCCAGAGGTGT 3721
 Db 3 TCGTGCCAGTGTGT 18
 RESULT 2004
 ID ADP46373/c
 XX ADP46373 standard; DNA; 19 BP.
 AC ADP46373;
 XX
 DT 26-AUG-2004 (first entry)
 XX
 DE Extend primer 2 used to genotype human NUMA1/FLJ20625/LOC220074 SNP.
 XX
 XX breast cancer; cytostatic; gene therapy; human; ss; primer; PCR; SNP;
 KW single nucleotide polymorphism; NUMA1; FLJ20625; LOC220074;
 KW chromosome 11q13.3; probe.
 XX
 OS Homo sapiens.
 XX
 PN WO2004047623-A2.
 XX
 PD 10-JUN-2004.
 XX
 PF 25-NOV-2003; 2003WO-US037948.
 XX
 PR 25-NOV-2002; 2002US-0429136P.
 PR 24-JUL-2003; 2003US-0490234P.
 XX
 PA (SEQU-) SEQUENOM INC.
 XX
 XX Roth RB, Nelson MR, Braun A, Kammerer SM, Reneland R;
 XX WPI; 2004-441051/41.
 DR
 XX Identifying a subject at risk of breast cancer by detecting the presence

PT of polymorphic variations in the ICAM, MAPK10, KIAA0861, NUMA1 or GALE
 PT regions which are associated with breast cancer in a nucleic acid sample
 PT from a subject.
 XX
 XX Example 7; Page 106; 289pp; English.
 XX
 XX The invention relates to a novel method for identifying a subject at risk
 CC of breast cancer comprising detecting the presence or absence of one or
 CC more polymorphic variations associated with breast cancer in a nucleic
 CC acid sample from a subject. The method of the invention has cytostatic
 CC applications and may be useful for identifying a subject at risk of
 CC breast cancer, for early diagnosis, prevention and treatment of breast
 CC cancer, possibly via gene therapy, as well as to analyse and predict a
 CC response to a breast cancer treatment and in clinical drug trials. The
 CC current sequence is that of an Extend primer (also described as probe) of
 CC the invention which was used to genotype human NUMA1/FLJ20625/LOC220074
 CC region gDNA. FLJ20625 and LOC220074 have been mapped to chromosomal
 CC position 11q13.3.
 XX
 SQ Sequence 19 BP; 2 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2525 GGCAGGGAGCTGGGCC 2540
 Db 19 GGCAGGGAACTGGGCC 4
 RESULT 2005
 ID AAQ71320/c
 XX AAQ71320 standard; DNA; 20 BP.
 AC AAQ71320;
 XX
 DT 25-MAR-2003 (revised)
 DT 25-APR-1995 (first entry)
 XX
 DE Primer for the detection of recombinant viruses.
 XX
 KW Recombinant viruses; retro-viruses; PCR primer; ss.
 XX
 OS Synthetic.
 XX
 PN WO9419491-A1.
 XX
 PD 01-SEP-1994.
 XX
 PF 16-FEB-1994; 94WO-US001643.
 XX
 PR 17-FEB-1993; 93US-00018118.
 XX
 PA (GENE-) GENETIC THERAPY INC.
 XX
 XX Otto RE, Allen CL;
 PI
 XX WPI; 1994-294351/36.
 DR
 XX
 PT Detecting recombination of viral nucleic acid sequences - by amplifying
 PT recombined product with specific primers, esp. for detecting replication
 PT competent retro-viruses produced by gene therapy.
 XX
 XX Example 1; Page 37; 51pp; English.
 XX
 XX AAQ71320 was used as a primer in the PCR amplification of replication
 CC competent, recombined viruses (esp. retro- or adeno-viruses). This
 CC enabled said viruses to be detected in very small concentrations (eg. 1
 CC in 100 000 cells), in body fluids and tissue samples (useful in gene
 CC therapy), and in viral vector preparations, cell lines and transduced
 CC target cells. (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3781 ACACCTGGTGTCTAAC 3796
 16 ACACCTGGTGTCTGAC 1

Db

RESULT 2006
 AAQ76126
 ID AAQ76126 standard; DNA; 20 BP.
 XX
 AC AAQ76126;
 XX
 DT 25-MAR-2003 (revised)
 DT 01-AUG-1995 (first entry)
 XX
 DE Human MDC PCR primer BC012.
 XX
 KW MDC protein; breast cancer; mamma carcinoma; ovary cancer; chromosome-17;
 KW primer; polymerase chain reaction; PCR; ss.
 XX
 OS Synthetic.
 XX
 PN EP633268-A2.
 XX
 PD 11-JAN-1995.
 XX
 PF 13-MAY-1994; 94EP-00107487.
 XX
 PR 14-MAY-1993; 93JP-00136602.
 PR 22-SEP-1993; 93JP-00257455.
 PR 23-FEB-1994; 94JP-00049904.
 PR 12-APR-1994; 94JP-00073328.
 XX
 PA (CANC-) CANCER INST.
 PA (EISA) EISAI CO LTD.
 XX
 PI Nakamura Y, Emi M;
 XX
 WPI; 1995-038478/06.
 XX
 PT Novel MDC protein and DNA encoding it - used to develop prods. for the
 PT study, diagnosis and therapy of cancers, partic. breast and ovarian
 PT cancer.
 XX
 PS Example 8; Page 18; 123pp; English.
 XX
 CC RT-PCR was used to detect MDC expression in tissues of the human CNS
 CC (cerebrum, cerebellum and fetal brain) and in endocrine or reproductive
 CC organs (testis, ovary, mamma, adrenal gland, thymus and pancreas) using
 CC the primers given in AAQ76125 (bases 1764-1780 of the MDC cDNA sequence
 CC of AAQ76120) and AAQ76126 (antisense, bases 1976-1957 of AAQ76120).
 CC (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 20 BP; 5 A; 8 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2097 CCAGGACACCCGAGC 2112
 1 CCAGGACACCCGAGC 16

Db

RESULT 2007
 AAQ75221
 ID AAQ75221 standard; DNA; 20 BP.
 XX
 AC AAQ75221;

XX
 DT 25-MAR-2003 (revised)
 DT 04-SEP-1995 (first entry)
 XX
 DE Amino labelled oligonucleotide (3+).
 XX
 KW Amino group; immunoassy; antibody; detection; ss.
 XX
 OS Synthetic.
 XX
 FH Key modified_base 1 Location/Qualifiers
 FT /tag= a
 FT /note= "Amino-A"
 XX
 PN WO9427150-A1.
 XX
 PD 24-NOV-1994.
 XX
 PF 28-APR-1994; 94WO-JP000725.
 XX
 PR 10-MAY-1993; 93JP-00132739.
 XX
 PA (NISR) NISSUI PHARM CO LTD.
 XX
 PI Oku Y, Toyoda N;
 XX
 WPI; 1995-006969/01.
 XX
 PT Simultaneous assay of several antigens or antibodies - using single
 PT immobilised nucleotide(s), and a mobile phase containing the
 PT complementary nucleotide(s) bound to a labelled ligand for the molecule
 PT to be assayed.
 XX
 PS Example 1; Page 16; 49pp; Japanese.
 XX
 CC The sequences given in AAQ75219-25 are oligonucleotides which are used to
 CC demonstrate the method of the invention. These oligonucleotides may
 CC contain an amino group on their 5' end. The method constitutes an
 CC immunoassy of several immunochemical ligands. The reagent contains
 CC antibodies which specifically recognise one of the ligands to be assayed.
 CC Each antibody is attached to a different specific poly- or
 CC oligonucleotide, such as these. The antibodies are attached to a suitable
 CC label, e.g. horseradish peroxidase, biotin, avidin, digoxigenin, etc. The
 CC reagent reacts with the ligand to be assayed to give a complex which
 CC bears the label and also bears the nucleotide specific to the ligand. A
 CC complementary nucleotide is then added to which the complex becomes
 CC attached. The immobilised complex can then be assayed using the label.
 CC Several antibodies or antigens in a sample can be assayed using a single
 CC reagent. (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3651 CTTGCTTGCCTGCAGG 3666
 4 CTTGCTTGCCTGCAGG 19

Db

RESULT 2008
 AAQ75223
 ID AAQ75223 standard; DNA; 20 BP.
 XX
 AC AAQ75223;
 XX
 DT 25-MAR-2003 (revised)
 DT 04-SEP-1995 (first entry)
 XX
 DE Amino labelled oligonucleotide 3(+).

KW Amino group; immunoassay; antibody; detection; ss.

OS Synthetic.

PN WO9427150-A1.

XX 24-NOV-1994.

PD 28-APR-1994; 94WO-JP000725.

PF 10-MAY-1993; 93JP-00132739.

PR (NISR) NISSUI PHARM CO LTD.

XX Oku Y, Toyoda N;

PI WPI; 1995-006969/01.

XX Simultaneous assay of several antigens or antibodies - using single
PT immobilised nucleotide(s), and a mobile phase containing the
PT complementary nucleotide(s) bound to a labelled ligand for the molecule
PT to be assayed.

XX Example 2; Page 18; 49pp; Japanese.

SS The sequences given in AAQ75219-25 are oligonucleotides which are used to
CC demonstrate the method of the invention. These oligonucleotides may
CC contain an amino group on their 5' end. The method constitutes an
CC immunoassay of several immunochemical ligands. The reagent contains
CC antibodies which specifically recognise one of the ligands to be assayed.
CC Each antibody is attached to a different specific poly- or
CC oligonucleotide, such as these. The antibodies are attached to a suitable
CC label, e.g. horseradish peroxidase, biotin, avidin, digoxigenin, etc. The
CC reagent reacts with the ligand to be assayed to give a complex which
CC bears the label and also bears the nucleotide specific to the ligand. A
CC complementary nucleotide is then added to which the complex becomes
CC attached. The immobilised complex can then be assayed using the label.
CC Several antibodies or antigens in a sample can be assayed using a single
CC reagent. (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. NO. 1.8e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 3651 CTTGCTTGCTGCAGG 3666

DB 4 CTTGATGCTGCAGG 19

RESULT 2009

AAAT41201

ID AAAT41201 standard; DNA; 20 BP.

XX AAAT41201;

DT 03-DEC-1996 (first entry)

DE Human gene signature HUMGS01467-derived sense primer.

XX Gene signature; messenger RNA; mRNA; relative abundance; frequency;
KW human; cloning; mapping; non-biased library; diagnosis; detection;
KW cell typing; abnormal cell function; primer; PCR; amplification;
KW polymerase chain reaction; ss.

OS Synthetic.

XX WO9514772-A1.

PN 01-JUN-1995.

PD 11-NOV-1994; 94WO-JP001916.

XX 12-NOV-1993; 93JP-00355504.

XX (MATS/) MATSUBARA K.

PA (OKUB/) OKUBO K.

XX Matsubara K, Okubo K;

PI WPI; 1995-206931/27.

XX Single-stranded DNA for identifying gene signatures - isolated from 3'-
PT directed human cDNA library that reflects relative abundance of corresp.
PT mRNA in specific human tissues.

XX Example 7; Fig 8; 2245pp; Japanese.

XX Primers T41001-T41382 are derived from novel human gene signature (GS)
CC sequences which did not match with sequences deposited in Genbank release
CC 76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA
CC libraries prepared from various human tissues; synthesis of cDNA was
CC initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
CC Each library is constructed so as to reflect accurately the relative
CC abundance of different mRNAs in the particular tissue from which it was
CC derived. The appearance frequency of a given GS in a cDNA library can be
CC determined (esp. using primers and probes derived from the GS sequences)
CC as a means of diagnosing abnormal cell function or for recognising
CC different cell types. The primers T41201-2 amplify clone pm1688 which
CC comprises the GS HUMGS001467 (T20467), located on chromosome 19

XX Sequence 20 BP; 5 A; 10 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. NO. 1.8e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2701 CCCACCCCTGCCCTCA 2716

DB 5 CCCACCCCTGCCCTCA 20

RESULT 2010

AAV03673/C

ID AAV03673 standard; DNA; 20 BP.

XX AAV03673;

DT 22-MAY-1998 (first entry)

DE Probe for PZA-resistant Mycobacterium sp. pncA gene.

XX pncA gene; pyrazinamidase; pZase; differentiation; treatment;
KW Mycobacterium bovis; Mycobacterium tuberculosis; infection;
KW PZA-resistant; probe; identification; ss.

OS Synthetic.

OS Mycobacterium sp.

XX WO9745558-A1.

PD 04-DEC-1997.

PF 23-MAY-1997; 97WO-US008770.

PR 31-MAY-1996; 96US-00655821.

XX (UYJO) UNIV JOHNS HOPKINS.

PA Zhang Y, Scorpio A;

PI WPI; 1998-032662/03.

XX Identification of pyrazinamide resistant mycobacteria - used to
PT distinguish between M. bovis and M. tuberculosis; also methods for

PT treating mycobacterial infection.
 XX Claim 48; Page 50; 63pp; English.
 PS
 CC The present sequence is a probe for a pyrazinamide (PZA) resistant
 CC Mycobacterium sp. pncA gene, which encodes an altered pyrazinamidase
 CC (PZAse). A novel method for differentiating between M. bovis and M.
 CC tuberculosis comprises detecting in a sample an altered pncA gene
 CC encoding a His57Asp substitution indicating that the sample comprises M.
 CC bovis. The pncA gene and PZase may be used to treat individuals infected
 CC with PZA-resistant M. tuberculosis. The pncA gene or PZase may be
 CC administered with at least one other antimicrobial agent, e.g. isoniazid
 CC or rifampicin. Probes corresponding to sections of the pncA gene may also
 CC be used to identify resistant strains or to distinguish between M. bovis
 CC and M. tuberculosis
 XX
 SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 512 TGGAGCGCTCCCGCA 527
 DB 20 TGGAGCGCTCCCGCA 5
 RESULT 2011
 AAV09181
 ID AAV09181 standard; DNA; 20 BP.
 XX
 AC AAV09181;
 XX
 XX 09-JUN-1998 (first entry)
 DT
 DE Phosphorothioate oligonucleotide sequence 8065 targeting IL1R mRNA.
 XX
 KW Type I interleukin-1 receptor; IL1R; human; IL1 protein; hybridisation;
 KW Inflammation; ss; 5' untranslated region; phosphorothioate linkage.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /note= "Phosphorothioate internucleotide linkage"
 XX
 PN W09744656-A1.
 XX
 PD 27-NOV-1997.
 XX
 PF 12-MAY-1997; 97WO-US007147.
 XX
 PR 21-MAY-1996; 96US-00651692.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 XX Miraglia L, Bennett CF, Dean N, Geiger T;
 PI WPI; 1998-018646/02.
 XX
 DR 2'-substituted oligonucleotide(s) specific for interleukin-1 receptor
 PT type I - used to modulate expression and detect overexpression of the
 PT receptor.
 XX
 PS Example 5; Page 19; 63pp; English.
 XX
 CC This is a novel oligomer comprising 20 covalently linked nucleotides
 CC which bind to the 5' untranslated region of the interleukin-1 receptor
 CC (IL1R) mRNA. Expression of IL1R, in cells and tissues can be modulated by
 CC compositions comprising oligomers which are able to specifically
 CC hybridise with target areas of its encoding sequence. the composition can

CC be used for treatment of disease in humans caused by excessive receptor
 CC expression, e.g. inflammation. When labelled they can be used
 CC diagnostically to determine overexpression of IL1R, also to determine
 CC localisation and distribution of this expression for research, diagnostic
 CC or therapeutic purposes
 XX
 SQ Sequence 20 BP; 0 A; 11 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 2587 GCGCTCGGCTCCCTCC 2602
 DB 2 GCGCTCGGCTCCCTCC 17
 RESULT 2012
 AAZ01480
 ID AAZ01480 standard; DNA; 20 BP.
 XX
 AC AAZ01480;
 XX
 XX 07-OCT-1999 (first entry)
 DT
 DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
 XX
 KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
 KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
 KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
 KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
 XX
 OS Synthetic.
 OS Chlamydia trachomatis.
 XX
 PN W09928475-A2.
 XX
 PD 10-JUN-1999.
 XX
 PF 27-NOV-1998; 98WO-IB001939.
 XX
 PR 28-NOV-1997; 97FR-00015041.
 PR 17-DEC-1997; 97FR-00016034.
 PR 04-NOV-1998; 98US-0107077P.
 XX
 PA (GEST) GENSET.
 XX
 XX Griffais R;
 PI WPI; 1999-371125/31.
 XX
 DR Genome sequence of Chlamydia trachomatis.
 XX
 PT Disclosure; Page 1446; 1755pp; English.
 PS
 XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames
 CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
 CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
 CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
 CC be used to control growth of the microorganism. Chlamydia trachomatis is
 CC responsible for a large number of diseases, e.g. eye diseases such as
 CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
 CC conjunctivitis; genital diseases such as nongonococcal urethritis,
 CC epididymitis, cervicitis, salpingitis, perihhepatitis, Bartholinitis;
 CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
 CC The polypeptides of the invention may be of use in treating these
 CC diseases
 XX
 SQ Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      193 GAGGCTGAGGACACAG 208
Db      1 GAGCTCTGAGGACACAG 16

RESULT 2013
AAV65183
ID      AAV65183 standard; DNA; 20 BP.
XX
AC      AAV65183;
XX
DT      04-MAR-1999 (first entry)
XX
DE      Human ABO DNA PCR primer UafTx7.
XX
KW      Blood group; O allele; baboon; carrier; phenotype; xenotransplantation;
KW      A allele; B allele; ABO; human; PCR primer; ss.
XX
OS      Synthetic.
OS      Homo sapiens.
XX
PN      WO9850559-A1.
XX
PD      12-NOV-1998.
XX
PF      08-MAY-1998; 98WO-US009464.
XX
PR      09-MAY-1997; 97US-00853774.
XX
PA      (UYLO-) UNIV LOMA LINDA MEDICAL CENT.
XX
PI      Diamond D, Nehlsencannarella S, Fagoaga OR, Szalay A;
XX
DR      WPI; 1999-034726/03.
XX
PT      New isolated baboon histo-blood group O allele - used to develop products
PT      for producing group O non-human primates for use in xenotransplantation
PT      of organs and tissues.
XX
PS      Example 2; Page 34; 50pp; English.
XX
CC      AAV65179-V65183 are PCR primers used in the amplification of human ABO
CC      DNA which is used in a method for identifying baboon O alleles, and
CC      carriers of O alleles as well as methods for producing baboons and baboon
CC      cells, tissues and organs having a group O phenotype. Such cells, tissues
CC      and organs can be used for xenotransplantation
XX
SQ      Sequence 20 BP; 3 A; 10 C; 5 G; 2 T; 0 U; 0 Other;

Query Match      0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1977 GCCCTCCGAGGCCCC 1992
Db      2 GCCCTCCGAGGCCCC 17

RESULT 2014
AAX29317
ID      AAX29317 standard; DNA; 20 BP.
XX
AC      AAX29317;
XX
DT      10-JUN-1999 (first entry)
XX
DE      JNK1-specific probe ISIS No: 12548.
XX
KW      Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1;
KW      JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe;
KW      hyperproliferative disease; human; ss.
XX

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```

OS      Synthetic.
OS      Homo sapiens.
XX
PN      WO9909214-A1.
XX
PD      25-FEB-1999.
XX
PF      07-AUG-1998; 98WO-US016488.
XX
PR      13-AUG-1997; 97US-00910629.
XX
PA      (ISIS-) ISIS PHARM INC.
XX
PI      McKay R, Dean N, Monia BP, Nero PS, Gaarde WA;
XX
DR      WPI; 1999-181060/15.
XX
PT      New antisense oligonucleotides that detect and modulate the expression of
PT      Jun N-terminal kinase proteins - useful for treating hyperproliferative
PT      diseases and inhibiting tumor growth in animals, and for modulating
PT      protein phosphorylation by these proteins.
XX
PS      Example 3; Page 66; 190pp; English.
XX
CC      The invention relates to antisense oligonucleotides that detect and
CC      modulate the expression of Jun N-terminal kinase (JNK) proteins. The
CC      oligonucleotides specifically hybridize to a nucleic acid encoding a
CC      JNK1, JNK2 or JNK3 protein, and which modulate expression of these
CC      proteins. The oligonucleotides are useful for modulating JNK protein
CC      expression and cell cycle progression in cultured cells or animal cells.
CC      The oligonucleotides are also useful for modulating the phosphorylation
CC      of a protein that has been phosphorylated by a JNK protein, and the
CC      expression of a cellular protein that promotes one or more metastatic
CC      events. The oligonucleotides also form pharmaceutical compositions for
CC      treating animals with a hyperproliferative disease, and for inhibiting
CC      tumor growth in an animal
XX
SQ      Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Query Match      0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1060 GCGTCCATGAGTCCA 1075
Db      5 GCATCCATGAGTCCA 20

RESULT 2015
AAA09034/C
ID      AAA09034 standard; DNA; 20 BP.
XX
AC      AAA09034;
XX
DT      15-AUG-2000 (first entry)
XX
DE      Primer for RT-PCR with MIN6 RNA.
XX
KW      Primer; WFS1; antidiabetic; renal; opthalmic; auditory; gene therapy; ss.
XX
OS      Homo sapiens.
XX
PN      WO200018787-A1.
XX
PD      06-APR-2000.
XX
PF      28-SEP-1999; 99WO-US022429.
XX
PR      28-SEP-1998; 98US-0102031P.
XX
PA      (UNIW ) UNIV WASHINGTON.
PA      (PERM/) PERMUTT M A.
PA      (INOUE/) INOUE H.

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```

PA (MUEC/) MUECKLER M.
XX
XX Permutt MA, Inoue H, Mueckler M;
XX
XX WPI; 2000-293106/25.
XX
XX Nucleic acids associated with, and useful for the diagnosis and treatment
XX of Wolfram syndrome.
XX
XX Example 1; Page 28; 87pp; English.
XX
XX AAA09033-34 are primers based on a predicted 5' untranslated region,
XX based on the mouse EST sequence that was homologous to the human WFS1
XX cDNA. They were used for RT-PCR with MIN6 RNA. The WFS1 gene is from
XX human chromosome 4p, and is located between markers D4S500 and D4S431,
XX mutations of which are associated with Wolfram syndrome. The nucleic
XX acids may be used as a biological marker for early diagnosis of Wolfram
XX syndrome and for predicting the predisposition of an individual to the
XX syndrome. Disruptions of the gene which result in low protein expression
XX or the expression of inactive protein products are associated with the
XX development of the disease. The gene is also useful for gene replacement
XX therapy (i.e. to rectify the mutations and/or supplement the individuals
XX own production of the polypeptide) and for developing new methods and
XX agents (i.e. agents which bind with either the nucleic acids or the
XX protein to modulate its expression and/or activity) for treating Wolfram
XX syndrome. It is particularly useful for generating antibodies to the
XX protein (i.e. Ab). Wolfram syndrome is a combination of familial juvenile
XX -onset diabetes mellitus, diabetes insipidus, optic atrophy and deafness
XX
XX Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 187 GAGACGAGGCTGAGG 202
DB 18 GAGACGAGGCTGAGG 3
RESULT 2016
AAZ60549/c
ID AAZ60549 standard; DNA; 20 BP.
XX
XX AAZ60549;
AC
XX
XX 05-MAY-2000 (first entry)
DT
XX
XX PCR primer used to amplify and mutate the MLV integrase gene.
DE
XX
XX Integrase; MLV; retroviral vector; non-coding region;
KW site-specific integration; genomic rearrangement; gene therapy;
KW viral infection; PCR primer; ss.
XX
XX Murine leukemia virus.
OS
XX
XX WO200001835-A2.
PN
XX
XX 13-JAN-2000.
PD
XX
XX 30-JUN-1999; 99WO-EF004521.
PF
XX
XX 01-JUL-1998; 98DK-00001016.
PR
XX
XX (BAVA-) BAVARIAN NORDIC RES INST AS.
PA
XX
XX Guenzburg W, Salmons B, Goller S, Klein D;
PI
XX
XX WPI; 2000-171021/15.
DR
XX
XX New retroviral vector containing heterologous sequence and sequences for
XX site-specific integration into a non-coding genomic region, useful in
XX gene therapy and for production of retroviral particles.
PT

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XX
XX Example 3; Page 22; 42pp; English.
XX
XX PCR primer AAZ60549, which is specific to the pol gene within the
XX integrase region, was used in conjunction with PCR primers AAZ60550-58
XX (which are specific to the integrase region within the pol gene). The
XX primers were used for deletion mutagenesis at the C-terminus of the
XX murine leukemia virus (MLV) integrase gene, beyond the catalytic site.
XX The resulting protein is inactivated. The mutated gene was used in the
XX construction of an integrase deficient packaging cell line for the
XX retroviral vectors of the invention. These retroviral vector comprise at
XX least one heterologous sequence and at least one sequence that allows the
XX site-specific integration of the heterologous sequence into a non-coding
XX region of the genome. The retroviral vectors of the invention are safer
XX than known retroviral vectors because they integrate specifically into a
XX non-coding region of the host genome, rather than randomly, thus
XX eliminating the risk of causing deleterious genomic rearrangements. The
XX retroviral vectors (and systems containing them in packaging cells or
XX derived retroviral particles (RVP)) are used for in vivo or in vitro gene
XX therapy of viral infections. They are also used in the treatment of
XX genetic, metabolic, proliferative or other diseases
XX
XX Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3781 ACACCTGGTGGCTAAC 3796
DB 16 ACACCTGGTGGCTGAC 1
RESULT 2017
AAC62860
ID AAC62860 standard; DNA; 20 BP.
XX
XX AAC62860;
AC
XX
XX 06-FEB-2001 (first entry)
DT
XX
XX JNK antisense oligonucleotide ISIS #12548.
DE
XX
XX Antisense; gene therapy; JNK2 protein; apoptosis; cancer;
KW cellular hyperproliferation; Alzheimer's; Parkinson's disease;
KW amyotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;
KW myocardial infarction; stroke; obstructive jaundice; polycystic kidney;
KW diabetes; Jun N-terminal kinase; ss.
XX
XX Homo sapiens.
OS
XX
XX WO2000059549-A1.
PN
XX
XX 12-OCT-2000.
PD
XX
XX 04-APR-2000; 2000WO-US008880.
PF
XX
XX 07-APR-1999; 99US-00287796.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX McKay R, Dean NM, Monia BP, Nero PS, Gaarde WA;
PI
XX
XX WPI; 2000-638427/61.
DR
XX
XX Novel methods for reducing apoptosis comprising contacting cells with
XX antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
XX cancer.
PT
XX
XX Example 3; Page 131; 160pp; English.
PS
XX
XX The present invention relates to antisense oligonucleotides (AAC62844-
XX C63000, AAA96093-A96099 and AAA07993) that hybridise specifically to a
XX

```


RESULT 2020
 AAA91225
 ID AAA91225 standard; DNA; 20 BP.
 XX AC
 XX AAA91225;
 XX
 XX 08-MAY-2001 (first entry)
 XX DE
 XX Antisense IGFBP-5 inhibitor #31.
 XX DE
 XX Insulin-like growth factor binding protein-5; IGFBP-5; human;
 KW Antisense oligonucleotide; hormone-regulated cancer; prostatic cancer;
 KW breast cancer; therapy; ss.
 XX KW
 XX Homo sapiens.
 OS
 XX WO200105435-A2.
 XX FN
 XX 25-JAN-2001.
 XX PD
 XX 19-JUL-2000; 2000WO-CA000853.
 XX PF
 XX 19-JUL-1999; 99US-0144495P.
 XX PR
 XX (UYBR-) UNIV BRITISH COLUMBIA.
 XX PA
 XX (MIYA/) MIYAKE H.
 XX
 XX Gleave M;
 PI
 XX WPI; 2001-168448/17.
 XX DR
 XX Composition for treating hormone-regulated cancer, e.g. breast and
 PT prostatic tumors, comprising an antisense oligonucleotide that inhibits
 PT expression of insulin like growth factor binding protein-5 by hormone-
 PT regulated tumor cells.
 XX PT
 XX Disclosure; Page 38; 45pp; English.
 XX PS
 XX This sequence represents an antisense oligonucleotide targeted against
 CC human insulin-like growth factor binding protein-5 (IGFBP-5). The
 CC invention relates to a composition for treatment of hormone-regulated
 CC cancer, comprising an antisense oligonucleotide (such as this sequence)
 CC which inhibits expression of IGFBP-5 by hormone-regulated tumor cells.
 CC The compositions is useful for delaying progression of hormone-regulated
 CC tumor cells such as prostatic cancer cells or breast cancer cells, to an
 CC androgen-independent state, by treating hormone sensitive tumor cells
 CC with the antisense sequence which inhibits expression of IGFBP-5 by the
 CC tumor cells. The composition can also be used for treating a hormone-
 CC responsive cancer in an individual, and administering the composition to
 CC the individual after initiation of hormone-withdrawal to induce apoptotic
 CC cell death of hormone-responsive tumor cells, and therefore delaying the
 CC progression of hormone-responsive cancer cells to a hormone-independent
 CC state in the individual. It can also be used for inhibiting or delaying
 CC metastatic bony progression of an IGF-1 sensitive tumour in a mammal, by
 CC administering the composition to inhibit the expression of IGFBP-5 by the
 CC hormone-responsive cancer cells, and therefore inhibiting or delaying
 CC metastatic bony progression of the tumour
 XX
 XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2618 CCTGCAGGGAAGCC 2633
 Db 1 CCTGCAGGGAAGCCTC 16
 |||||
 RESULT 2021
 AAF59861/C
 ID AAF59861 standard; DNA; 20 BP.

XX AAF59861;
 AC
 XX 04-MAY-2001 (first entry)
 DT
 XX Human protein kinase C-theta antisense oligonucleotide, SEQ ID NO:54.
 DE
 XX
 XX Human protein kinase C-theta; PKC-theta; PKCT; PKRKT; nPKC-theta; PRKCO;
 KW isozyme; serine/threonine protein kinase; signal transduction;
 KW calcium-independent function; JNK/SAPK pathway upstream activator;
 KW Jun N-terminal kinase/stress-activated protein kinase;
 KW T-cell signalling pathway; cell cycle control; cellular activation;
 KW API transcription factor activation; AIDS aetiology; apoptosis;
 KW cytoskeletal arrangement; proliferation; wound healing disorder;
 KW angiogenesis; insulin signalling; chromosome 10p15;
 KW expression inhibition; antisense; cancer; inflammation; diabetes;
 KW phosphorothioate; 2'-MOE gapmer; ss.
 XX KW
 OS Homo sapiens.
 XX
 XX US6190869-B1.
 XX PN
 XX 20-FEB-2001.
 XX PD
 XX 26-OCT-1999; 99US-00429322.
 XX PF
 XX 26-OCT-1999; 99US-00429322.
 XX PR
 XX (ISIS-) ISIS PHARM INC.
 XX PA
 XX Bennett CF, Cowser LM;
 XX PI
 XX WPI; 2001-210378/21.
 XX DR
 XX Novel antisense compound 8-30 nucleobases in length targeted to a nucleic
 PT acid molecule encoding human protein kinase C-theta useful for inhibiting
 PT expression of human protein kinase C-theta in human cells.
 PT
 XX Example 15; Col 43-44; 40pp; English.
 PS
 XX Sequences AAF59817-AAF59896 represent phosphorothioate 2'-MOE gapmer
 CC antisense targeted to the human protein kinase C-theta gene, which
 CC inhibit its expression. The antisense oligonucleotides were designed to
 CC target different regions of the human protein kinase C-theta RNA, and
 CC were analysed for their effect on protein kinase C-theta mRNA levels by
 CC quantitative real-time PCR. Protein kinase C-theta (also known as PKC-
 CC theta, PKCT, PRKCT, nPKC-theta and PRKCO) is one of several protein
 CC kinase C isozymes and is ubiquitously expressed, with the highest levels
 CC being found in haematopoietic cell lines. It has been shown to function
 CC in a calcium-independent fashion, and it is involved in a variety of
 CC signal transduction pathways, for example, it is an upstream activator of
 CC the JNK/SAPK (Jun N-terminal kinase/stress-activated protein kinase)
 CC pathway. Protein kinase C-theta is also involved in T-cell signalling
 CC pathways, cell cycle control, cellular activation, API transcription
 CC factor activation and the aetiology of AIDS, and has also been implicated
 CC in apoptosis, cytoskeletal arrangement, proliferation, and angiogenesis
 CC and wound repair. It is additionally involved in insulin signalling and
 CC is thought to play a role in the development of diabetes in humans. The
 CC oligonucleotides of the invention are useful for diagnosis, prevention
 CC and treatment of conditions associated with protein kinase C-theta
 CC expression, such as inflammation, cancer, wound healing disorders and
 CC diabetes
 XX
 XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1908 CCGCATGGACAGCC 1923
 Db 18 CCGCATGGACATCC 3
 |||||

RESULT 2022
AAC92581/c
ID AAC92581 standard; DNA; 20 BP.
XX
AC AAC92581;
XX
DT 27-MAR-2001 (first entry)
XX
DE Human nucleolin phosphorothioate antisense oligonucleotide, SEQ ID NO:31.
XX
DE Human nucleolin; P92; C23; phosphoprotein; ribosome biogenesis;
KW ribosome transport; cytokinesis; nucleogenesis; cell proliferation;
KW cell growth; transcriptional repression; replication;
KW signal transduction; chromatin decondensation; Ag-NOR family;
KW nucleolin antibody; systemic connective tissue disease; SLE;
KW systemic lupus erythematosus;
KW scleroderma-like chronic graft versus host disease;
KW expression inhibition; tumour formation; cancer; inflammation;
KW immune disorder; phosphorothioate; antisense oligonucleotide; ss.
XX
OS Homo sapiens.
XX
PN US6165786-A.
XX
PD 26-DEC-2000.
XX
PF 03-NOV-1999; 99US-00433699.
XX
PR 03-NOV-1999; 99US-00433699.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Cowser LM;
XX
XX WPI; 2001-079848/09.
XX
PT Novel antisense compound targeted to human nucleolin which specifically
PT hybridizes with and inhibits the expression of human nucleolin, useful
PT for modulating the expression of nucleolin in cells.
XX
PS Example 15; Col 41-42; 41pp; English.
XX
CC Sequences AAC92560-C92639 represent antisense oligonucleotides targeted
CC to the human nucleolin gene, which inhibit its expression. The antisense
CC oligonucleotides were designed to target different regions of the human
CC nucleolin mRNA, and were analysed for their effect on nucleolin mRNA
CC levels by quantitative real-time PCR. Nucleolin (also known as P92 or
CC C23) is the most abundant nucleolar phosphoprotein in actively growing
CC cells. Nucleolin primarily participates in ribosome biogenesis and
CC transport of ribosomal components, being able to transiently bind to pre-
CC ribosomes in the nucleolus via a ribonucleoprotein consensus sequence.
CC However, it has also been shown to be involved in cytokinesis,
CC nucleogenesis, cell proliferation and growth, transcriptional repression,
CC replication, signal transduction, and chromatin decondensation. Nucleolin
CC is a member of the Ag-NOR (active ribosomal gene located in the nucleolar
CC organiser region) family of proteins which are markers of active
CC ribosomal genes, and whose expression is associated with the prediction
CC of tumour growth rate. The presence of antibodies against nucleolin are
CC associated with systemic connective tissue diseases such as systemic
CC lupus erythematosus (SLE) and scleroderma-like chronic graft versus host
CC disease. The oligonucleotides of the invention are useful for diagnosis,
CC prevention and treatment of conditions associated with nucleolin
CC expression, such as tumour formation, immune disorders and inflammation
XX
SQ Sequence 20 BP; 2 A; 9 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 188 AGGACGAGGCTGAGGA 203
|||||||

Db 20 AGGACGAGGATGAGGA 5
RESULT 2023
AAH20613/c
ID AAH20613 standard; DNA; 20 BP.
XX
AC AAH20613;
XX
DT 09-AUG-2001 (first entry)
XX
DE Human MTR1 exon19/intron19 junction.
XX
DE MTR1; TRP-related protein; Ca2+ regulation; calcium regulation; tumor;
KW transient receptor potential family; BWS; Beckwith-Wiedemann syndrome;
KW lip15.5 abnormality; chromosome 11; anticancer; developmental activity;
KW intracellular calcium ion regulation; hormone; growth factor; apoptosis;
KW cell growth; cell death; cell differentiation; urogenital disease;
KW polycystic kidney disease; calcium influx; Wilms tumor; rhabdoid tumor;
KW rhabdomyosarcoma; ds.
XX
OS Homo sapiens.
XX
PH Key Location/Qualifiers
FT exon 1..10
FT /tag= a
FT /number= 19
FT intron 11..20
FT /tag= b
FT /number= 19
XX
PN WO200132693-A2.
XX
PD 10-MAY-2001.
XX
PF 06-NOV-2000; 2000WO-DE003876.
XX
PR 04-NOV-1999; 99DE-01053167.
XX
PA (UYGU-) UNIV GUTENBERG JOHANNES.
XX
PI Prawitt D, Pelletier J, Zabel B;
XX
XX WPI; 2001-316417/33.
XX
CC DNA encoding MTR1 protein, useful e.g. for treating Beckwith-Wiedemann
CC syndrome and tumors, also related proteins and antibodies.
XX
CC Disclosure; Fig 9; 46pp; German.
XX
CC This invention describes a novel DNA sequence (I) encoding the MTR1
CC protein that: (i) has at least one biological activity of a TRP
CC (transient receptor potential) family protein; (ii) is connected with
CC etiology of BWS (Beckwith-Wiedemann syndrome) and/or (iii) is connected
CC with tumors involving lip15.5 abnormalities. The products of the
CC invention have anticancer and developmental activity. MTR1 is involved in
CC regulation of intracellular calcium ion levels, which are essential for
CC cellular responses to hormones and/or growth factors; also in apoptosis
CC and cell growth, death and differentiation, and in urogenital diseases,
CC including polycystic kidney disease. (I) and related ribozymes, antisense
CC RNA, proteins and antibodies (Ab) are used to treat or prevent diseases
CC associated with altered expression of the MTR1 gene or activity of its
CC protein, or with calcium influx into cells, e.g. BWS, Wilms tumor,
CC rhabdoid tumors and rhabdomyosarcoma. Probes from (I), or Ab, are also
CC used for diagnosis of such diseases. (I) can also be used for recombinant
CC production of MTR1 proteins (II) (used for analysis, characterization and
CC therapy), as tissue or chromosomal markers, for identifying genetic
CC diseases and related sequences, as primers for genetic fingerprinting, as
CC source of oligonucleotides for biochips, and to raise anti-protein or
CC anti-DNA antibodies. (II) are used to raise Ab, as reagents in
CC competitive assays for (II), as tissue markers; for identifying
CC interacting proteins and in screening for (anti)agonists. This sequence
CC represents human MTR1 gene exon 19/intron 19 junction region described in

CC the method of the invention
XX Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
SQ Mismatches 1; Indels 0; Gaps 0;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2731 GGGTACCTGAGATGG 2746
Db 16 GGGTACCTGAGATGG 1

RESULT 2024
ABK92361
ID ABK92361 standard; DNA; 20 BP.
XX AC ABK92361;
XX DT 16-AUG-2002 (first entry)
XX DE Human CYP1A1 RT-PCR primer #2.
XX KW Primer; reverse transcription; RT-PCR; ss; human; CaCo2; CYP1A1; MRP1;
KW CYP3A4; intestinal barrier; pharmacology; xenobiotic; MRP3;
KW environmental pollutant; CYP3A7; CYP3A4; CYP3A5; NADPH reductase; MRP2;
KW CYP2B1; CYP2D6; CYP2E1; MDR1; MDR3; GST Pi; GST alpha 4; UGT2B7;
KW UGT1A6; beta actin.
XX OS Homo sapiens.
XX EP1158045-A1.
XX 28-NOV-2001.
XX 17-MAY-2000; 2000EP-00870108.
XX 17-MAY-2000; 2000EP-00870108.
XX (UYLO-) UNIV CATHOLIQUE LOUVAIN.
XX Schneider Y, Burtreau N;
XX WPI; 2002-407056/44.
XX CaCo 2 cell line having enhanced expression of CYP3A4 without the
XX addition of an inducer for CYP3A4 expression, useful in in vitro models
XX for screening the bioavailability of pharmaceutical compounds,
XX xenobiotics or environmental pollutants.
XX Example 2; Page 12; 38pp; English.

This invention relates to a novel CaCo 2 cell line showing an enhanced
XX expression of CYP3A4 without the addition of an inducer for CYP3A4
XX expression. CYP3A4 is the major form of cytochrome P450 expressed in the
XX liver, this plays an important role in metabolism of orally taken drugs.
XX The invention also comprises a method for growing this cell line and a
XX culture medium. The cell line of the invention may be used as an in vitro
XX model of the intestinal barrier and may be used as a tool in pharmaco-
XX toxicology. The cell line is also useful in in-vitro models for screening
XX the bioavailability of pharmaceutical compounds, xenobiotics or
XX environmental pollutants. The invention also discloses RT-PCR primers
XX that may be used to analyse the expression of genes with sequence
XX similarity to CYP3A4 such as CYP3A7, CYP3A4, CYP3A5, NADPH reductase,
XX CYP2B1, CYP2D6, CYP2E1, CYP1A1, MDR1, MDR3, MRP1, MRP2, MRP3, GST
XX PI, GST alpha 4, UGT2B7, UGT1A6 and beta actin in the cell line of the
XX invention. The present sequence represents a reverse transcription (RT)
XX PCR primer used to quantify the expression of one of the above mentioned
XX genes in the cell line of the invention under different culture
XX conditions
XX Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1188 GCTGACCTGGGCAAG 1203
Db 2 GCTGACCTGGGCAAG 17

RESULT 2025
AAL45762/C
ID AAL45762 standard; DNA; 20 BP.
XX AC AAL45762;
XX DT 27-JUN-2002 (first entry)
XX DE Cancer cells detection oligonucleotide M29.
XX KW Cancer; extranuclear DNA; stem-loop; DNA-binding protein; cytostatic;
KW tumour cell detection; ss.
XX OS Homo sapiens.
XX Key Location/Qualifiers
XX protein_bind 1..7
XX /tag= a
XX /bound_moiety= "DeltaEF1"
XX misc_binding 2
XX /tag= b
XX /bound_moiety= "nucleotide 17 of itself"
XX misc_binding 4..7
XX /tag= c
XX /bound_moiety= "nucleotides 15-12 of itself"
XX protein_bind 9..20
XX /tag= d
XX /bound_moiety= "CHOP"
XX stem_loop 9..10
XX /tag= e
XX misc_binding 12..15
XX /tag= f
XX /bound_moiety= "nucleotides 7-4 of itself"
XX misc_binding 17
XX /tag= g
XX /bound_moiety= "nucleotide 2 of itself"

DE10046318-A1.
XX 28-MAR-2002.
XX 19-SEP-2000; 2000DE-01046318.
XX 19-SEP-2000; 2000DE-01046318.
XX (ABXE/) ABKEN H.
XX Abken H, Schinkoethe T;
XX WPI; 2002-331116/37.
XX Detecting tumor cells from presence of specific stem-loop DNA molecules
XX outside the nucleus, useful for diagnosis and monitoring of tumors.
XX Claim 21; Page 13; 27pp; German.

The present invention relates to a method of detecting tumour cells, by
XX detecting extranuclear DNA consisting of a single-strand with a double-
XX stranded stem-loop structure containing at least 2 binding sites for DNA
XX binding proteins. The method can be used to detect cancer cells in tissue
XX sections, biopsies, body fluids etc, and can be used in the diagnosis and
XX monitoring of cancer. The present sequence is an extranuclear DNA
XX sequence capable of being detected using the method of the invention

SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3651 CTGCTGCTGCTGAGG 3666
 DB 17 CTGCTGCTGCTGAGG 2
 RESULT 2026
 ABN99718/c
 ID ABN99718 standard; DNA; 20 BP.
 XX AC
 XX ABN99718;
 XX DT 16-AUG-2002 (first entry)
 XX DE Human clusterin inhibiting antisense oligonucleotide 52.
 XX KW Human; antisense inhibition; antisense oligonucleotide; clusterin;
 KW hypercholesterolaemia; cardiovascular disorder; ss;
 KW hyperproliferative disorder; hyperlipidemic disorder;
 KW phosphorothioate backbone; 2'-O-methoxyethyl wing.
 XX OS Homo sapiens.
 XX PN WO200222635-A1.
 XX PD 21-MAR-2002.
 XX PF 10-SEP-2001; 2001WO-US028235.
 XX PR 11-SEP-2000; 2000US-00659791.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI Monia BP, Freier SM;
 XX WPI; 2002-404805/43.
 XX DR Novel antisense compound targeted to nucleic acid molecule encoding
 PT clusterin, useful for treating animal having disease associated with
 PT clusterin such as hyperlipidemic disorder, cardiovascular disorder.
 PS Claim 3; Page 84; 125pp; English.
 XX CC The invention comprises antisense oligonucleotides that are capable of
 CC inhibiting expression of the human clusterin gene. The antisense
 CC oligonucleotides of the invention are useful for inhibiting the
 CC expression of clusterin in cells. The antisense oligonucleotides are also
 CC useful for treating an animal with a disease or condition associated with
 CC clusterin (e.g. hypercholesterolaemia; cardiovascular disorders;
 CC hyperproliferative disorders; and hyperlipidemic disorders). The present
 CC DNA sequence represents a clusterin antisense oligonucleotide of the
 CC invention. NOTE: The present DNA sequence has a phosphorothioate backbone
 CC and also contains 2'-O-methoxyethyl wings
 XX SQ Sequence 20 BP; 4 A; 8 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2407 CTGGGTGTCCCGCTG 2422
 DB 20 CTGGGTGTCCCGCTG 5
 RESULT 2027
 ABA00084/c
 ID ABA00084 standard; DNA; 20 BP.
 SQ Sequence 20 BP; 5 A; 12 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 856 GAGGAGCTGCTGAGG 871
 DB 18 GAGGAGCTGCTGAGG 3
 RESULT 2028
 ABN83781/c
 ID ABN83781 standard; DNA; 20 BP.
 XX AC
 XX ABN83781;
 XX DT 02-SEP-2002 (first entry)
 XX DE Xenobiotic response element PCR primer.
 XX KW Xenobiotic response element; XRE; transcription factor; drug screening;

XX ABA00084;
 XX 25-OCT-2002 (first entry)
 XX Human APC primer #1.
 DE
 XX KW Primer; probe; detection; Helicobacter pylori; integrity; ss.
 XX OS Homo sapiens.
 XX PN WO200259379-A2.
 XX PD 01-AUG-2002.
 XX PF 04-JAN-2002; 2002WO-US000267.
 XX PR 05-JAN-2001; 2001US-00755004.
 XX PA (EXAC-) EXACT SCI CORP.
 XX PI Shuber AP;
 XX WPI; 2002-599807/64.
 XX PT Detecting, grading and/or monitoring a Helicobacter pylori infection by
 PT detecting a high-integrity H. pylori nucleic acid in a patient sample.
 XX PS Example 5; Page 27; 28pp; English.
 XX CC The sequences given in ABA00075 and ABA00083-85 are probes and primers
 CC which were used in the detection of H. pylori infection pre- and post-
 CC treatment in a patient, compared to the presence of human DNA. These
 CC sequences may be used in the method of the invention for detecting a H.
 CC pylori infection. The method comprises: (a) determining an integrity of a
 CC Helicobacter pylori nucleic acid present; or (b) amplifying and detecting
 CC a first, second or third Helicobacter pylori nucleic acid at least 200,
 CC 400 or 600 in length, respectively, where a patient is identified with an
 CC infection if the integrity of the nucleic acid exceeds a predetermined
 CC threshold, or if the amplified first, second or third Helicobacter pylori
 CC nucleic acids are detected. The method is useful for detecting a
 CC Helicobacter pylori infection, determining its status, monitoring
 CC progression, evaluating efficacy of a treatment and diagnosing gastric
 CC disease by detecting a high-integrity Helicobacter pylori nucleic acid in
 CC a patient sample. Prior methods of using polymerase chain reaction (PCR)
 CC in assays detecting H. pylori infection usually lack the specificity to
 CC distinguish a successfully treated patient from a patient with a
 CC continuing H. pylori infection. The present invention of non-invasive
 CC method uses more sensitive and more specific assays to test for and to
 CC monitor H. pylori infection and course of treatment
 XX SQ Sequence 20 BP; 5 A; 12 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 856 GAGGAGCTGCTGAGG 871
 DB 18 GAGGAGCTGCTGAGG 3
 RESULT 2028
 ABN83781/c
 ID ABN83781 standard; DNA; 20 BP.
 XX AC
 XX ABN83781;
 XX DT 02-SEP-2002 (first entry)
 XX DE Xenobiotic response element PCR primer.
 XX KW Xenobiotic response element; XRE; transcription factor; drug screening;

KW dioxin; cytostatic; PCR; primer; ss.
 XX Unidentified.
 OS WO200237077-A2.
 XX 10-MAY-2002.
 XX 06-NOV-2001; 2001WO-KR001881.
 XX 06-NOV-2000; 2000KR-00065656.
 XX (MEDE-) MEDEXBIO CO.
 XX Lee S, Chang M, Shin H, Rho H;
 XX WPI; 2002-500130/53.
 XX Screening substances affecting transcription associated with promoter, by
 PT measuring protein expressed by a cell transfected with a reporter vector
 PT comprising reporter gene encoding protein and the promoter.
 XX Example 4; Page 41; 103pp; English.
 XX The invention provides a novel system for evaluating transcription
 CC activity in eukaryotes using novel reporter vectors designated as
 CC transcriptional regulation analysis system (TRAS). In an example from the
 CC invention, a TRAS-XRE vector was constructed comprising a reporter gene,
 CC a minimal promoter and a 5-repeated xenobiotic response element (XRE, see
 CC ABN8377), and was used to transfect HeLa and HepG2 cell lines. The
 CC present sequence is a primer that was used in a PCR to evaluate
 CC establishment of TRAS-XRE cell lines. Such cell lines can be used to
 CC examine the activity of transcription factors and to determine the
 CC effects of substances affecting transcription activity. These compounds
 CC can be used to treat or prevent a disease or disorder caused by dioxin-
 CC like compounds, such as endocrine disruption, decrease of sperm number,
 CC decrease of testis weight, endometriosis, breast cancer, testis cancer,
 CC prostate cancer, sexual organ malformation, decrease of immune function
 CC and hypospadias
 XX Sequence 20 BP; 4 A; 3 C; 6 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1007 TGACAAAGATCTCCCG 1022
 Db 16 TTCACAAAGATCTCCCG 1
 RESULT 2029
 ACC44846
 ID ACC44846 standard; DNA; 20 BP.
 XX ACC44846;
 AC ACC44846;
 XX 04-JUN-2003 (first entry)
 XX Human antibody 146B7 VH region PCR primer #2.
 DE Human; interleukin 15; IL-15; IL-15 receptor; antirheumatic;
 XX antirheumatic; antirheumatic; antipsoriatic; immunosuppressive;
 KW cytostatic; antimicrobial; psoriasis; arthritis; rheumatoid arthritis;
 KW inflammatory bowel disease; cancer; transplant rejection;
 KW infectious disease; 146B7; PCR primer; ss.
 OS Homo sapiens.
 OS Synthetic.
 OS WO2003017935-A2.
 XX 06-MAR-2003.
 PD

XX 23-AUG-2002; 2002WO-US026769.
 XX 23-AUG-2001; 2001US-0314731P.
 XX (GENM-) GENMAB INC.
 XX Van De Winkel JGJ, Van Dijk WA, Schuurman J, Gerritsen AF;
 PI Baadsgaard O;
 XX WPI; 2003-312792/30.
 XX New isolated human monoclonal antibody that specifically binds to human
 PT interleukin-15 and inhibits IL-15 induced proinflammatory effects, useful
 PT for treating or preventing rheumatoid arthritis and psoriasis.
 XX Example 5; Page 62; 114pp; English.
 XX The present invention describes an isolated human monoclonal antibody (I)
 CC that specifically binds to human interleukin 15 (IL-15) and inhibits IL-
 CC 15 induced proinflammatory effects, and particularly inhibits the ability
 CC of IL-15 to produce proinflammatory effects upon binding to its receptor.
 CC (I) has antirheumatic, antiarthritic, antiinflammatory, antipsoriatic, and
 CC immunosuppressive, cytostatic and antimicrobial activities. (I) is useful
 CC for inhibiting IL-15 induced, but not IL-2 induced, TNFalpha production
 CC by T cells or monocytes, which involves contacting IL-15 with (I). (I) is
 CC also useful for inhibiting IL-15 induced, but not IL-2 induced, T cell
 CC proliferation, which involves contacting IL-15 with (I) in the presence
 CC of T cells such as peripheral blood mononuclear cells (PBMCs) or CD4-2
 CC cells. (I) is useful for treating or preventing a disorder mediated by
 CC human IL-15, e.g., psoriasis, arthritis (preferably rheumatoid
 CC arthritis), inflammatory bowel disease, cancer, transplant rejection or
 CC an infectious disease. (I) is also useful for diagnosing an IL-15
 CC mediated disease comprising detecting the presence of IL-15 antigen, or a
 CC cell expressing IL-15 by contacting the sample, and a control sample,
 CC with the human antibody under conditions that allow for formation of a
 CC complex between antibody or its portion and IL-15 and detecting the
 CC formation of a complex, where formation of a complex is indicative of the
 CC presence of IL-15 in the sample. The present sequence represents a PCR
 CC primer for the human antibody 146B7 VH region, which is used in an
 CC example from the present invention
 XX Sequence 20 BP; 3 A; 3 C; 8 G; 4 T; 0 U; 2 Other;
 SQ Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 75.0%; Pred. No. 1.8e+03;
 Matches 15; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
 QY 853 GAGGAGGAGCTGTGGAGGC 872
 Db 1 SAGGTGCAGCTGKTGGAGTC 20
 RESULT 2030
 ABZ68355/c
 ID ABZ68355 standard; DNA; 20 BP.
 XX ABZ68355;
 AC ABZ68355;
 XX 22-APR-2003 (first entry)
 XX Primer XpYp-415AT used for determining telomere length.
 DE Telomere; cancer; age; telomerase; male infertility; primer; ss.
 KW Homo sapiens.
 XX WO2003000927-A2.
 XX 03-JAN-2003.
 PD 21-JUN-2002; 2002WO-GB002855.
 XX

PR 23-JUN-2001; 2001GB-00015451.
 PR 21-SEP-2001; 2001GB-00022755.
 PA (UYWA-) UNIV WALES COLLEGE OF MEDICINE.
 XX Baird DM;
 DR WPI; 2003-175294/17.
 XX Determining telomere length of mammalian chromosomal DNA by annealing and
 PT covalently binding telomeres, useful in assessing a potential anti-
 PT cancer treatment and/or assessing, treating or diagnosing male
 PT infertility.
 XX Claim 23; Page 36; 50pp; English.
 PS The present sequence represents a primer, which is used in the method of
 CC the invention for determining telomere length. The method comprises
 CC annealing the 3' end of a single-stranded oligonucleotide to a single-
 CC stranded overhang comprising TTAGGG repeat sequences, and covalently
 CC binding the oligonucleotide to the 5' end of the C-rich telomeric strand
 CC forming a ligation product. This ligation product is amplified to form a
 CC primer extension product, whose length is then detected. The method is
 CC useful in assessing potential anti-cancer treatments and cancer-related
 CC procedures. It can also be used in assessing telomere dynamics with age,
 CC effect of modulating telomerase activity, and in assessing, treating or
 CC diagnosing male infertility
 XX Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 3782 CACCTGGTTGCTAAC 3797
 DB 16 CACCTGGTTGCTAAC 1
 RESULT 2031
 ABZ68414
 ID ABZ68414 standard; DNA; 20 BP.
 AC ABZ68414;
 DT 22-APR-2003 (first entry)
 XX PCR primer used to amplify a 461 bp fragment of RNase L gene.
 DE Human; RNase L gene; cancer; mutation; PCR; primer; ss.
 XX Homo sapiens.
 OS WO2003000112-A2.
 PN 03-JAN-2003.
 PD 20-JUN-2002; 2002WO-US019516.
 PF 20-JUN-2001; 2001US-0299664P.
 PR (USSH) US DEPT HEALTH & HUMAN SERVICES.
 PA Carpten J, Trent JM, Smith J, Walsh PC, Isaacs WC, Stephan D;
 PI WPI; 2003-175260/17.
 DR Detecting cancer or predisposition to cancer in a mammal for producing a
 XX medicament for treating a mammal for cancer that is due to a complete or
 PT partial loss of wild-type RNase L by detecting at least one mutation in
 PT RNase L gene.
 XX Example 2; Page 19; 32pp; English.

XX PCR primers ABZ68414-15 were used to amplify a fragment of the human
 CC RNase L gene. The amplified fragment was examined for the presence of a
 CC mutation, in the course of the invention. The specification describes a
 CC method for detecting cancer or a predisposition to cancer in a mammal.
 CC The method comprises detecting at least one mutation in a gene encoding
 CC interferon inducible 2',5'-oligoadenylate-dependent RNase L in a test
 CC sample obtained from the mammal, where at least one mutation indicates
 CC cancer or predisposition to cancer. The method is useful for producing a
 CC medicament for treating a mammal prophylactically or therapeutically for
 CC cancer that is due to a complete or partial loss of wild-type RNase L
 XX Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 1293 CGTGAAGATGCTGAAA 1308
 DB 2 CGTGAAGCTGCTGAAA 17
 RESULT 2032
 ACC70595/c
 ID ACC70595 standard; DNA; 20 BP.
 XX ACC70595;
 AC ACC70595;
 DT 13-AUG-2003 (first entry)
 XX Sphingosine-1-phosphate lyase antisense oligonucleotide, SEQ ID 88.
 DE Cytostatic; antimicrobial; antiinflammatory; tumour; infection;
 XX sphingosine-1-phosphate lyase; developmental disorder; apoptosis;
 KW inflammation; antisense; phosphorothioate; ss.
 XX Synthetic.
 OS
 FT Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "This oligonucleotide has a phosphorothioate
 back bone and 2'-methoxyethyl (2'-MOE) wings at the 5',
 and 3' ends, which are 5 nucleotides in length. Also all
 cytidine residues are 5-methylcytidines"
 XX WO2003028637-A2.
 PN 10-APR-2003.
 PD 26-SEP-2002; 2002WO-US030575.
 PF 28-SEP-2001; 2001US-00967669.
 PR (ISIS-) ISIS PHARM INC.
 XX Bennett FC, Freter SM;
 PI WPI; 2003-381581/36.
 DR New antisense oligonucleotides for modulating sphingosine-1-phosphate
 XX lyase gene expression, useful for preventing or treating a developmental
 PT disorder or aberrant apoptosis, e.g. infection, inflammation or tumor
 PT formation.
 PT
 XX Example 15; Page 74; 118pp; English.
 PS The present invention relates to novel antisense oligonucleotides
 CC (ACC70520-ACC70597) which are targeted to a sphingosine-1-phosphate lyase
 CC DNA sequence, and specifically hybridizes with the nucleic acid and
 CC inhibits the expression of sphingosine-1-phosphate lyase. The antisense


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XX 01-AUG-2001; 2001US-00920671.
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Freier SM;
XX WPI; 2003-256431/25.
XX New antisense oligonucleotide compounds, useful for the diagnosis,
XX prevention and/or treatment of conditions with aberrant expression or
XX activity of CoREST, such as developmental and/or hyperproliferative
XX disorders.
XX Claim 3; SEQ ID NO 14; 145pp; English.
XX The invention relates to a new antisense compound comprising 8-50
XX nucleobases in length targeted to a nucleic acid molecule encoding a co-
XX repressor for Rb1 silencing transcription factor (CoREST), where the
XX compound specifically hybridises with and inhibits the expression of
XX CoREST. The CoREST antisense oligonucleotide has any of 72 specifically
XX claimed sequences of 20 bp, given in the specification. The methods and
XX compositions of the present invention are useful for the diagnosis,
XX prevention and/or treatment of diseases or conditions associated with
XX aberrant expression or activity of CoREST, such as a developmental
XX disorder and/or a hyperproliferative condition like neuronal cancer. The
XX current sequence represents an antisense oligonucleotide for the
XX inhibition of human CoREST mRNA levels. Nucleotides of the invention have
XX 2-MOE wings and a deoxy gap.
XX Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 1.8e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1140 CGAGCTCGAGTGCCT 1155
XX ||||| ||||| |||||
XX Db 5 CGAGCCCGAGTGCCT 20
XX
XX RESULT 2035
XX ADD42545
XX ID ADD42545 standard; DNA; 20 BP.
XX AC ADD42545;
XX DT 15-JAN-2004 (first entry)
XX DE Human infertility associated primer SEQ ID 406.
XX KW primer; male infertility; infertility-associated mutation;
XX azoospermia factor; Y-chromosome;
XX cystic fibrosis transmembrane conductance regulator; CTFR;
XX Kallmann syndrome; KALI; androgen resistance; steroid 21-hydroxylase;
XX CYP21; microarray; quantitative trait locus; in vitro fertilization;
XX oligospermia; ss.
XX OS Homo sapiens.
XX PN WO2003050299-A2.
XX PD 19-JUN-2003.
XX PF 10-DEC-2002; 2002WO-EP013995.
XX PR 10-DEC-2001; 2001DE-01060563.
XX PA (OGHA-) OGHAM GMBH.
XX PI Cullen P, Seedorf U;
XX WPI; 2003-505402/47.
XX
XX Investigating male genetic infertility, useful for diagnosis e.g. for
XX assessing suitability for in vitro fertilization, based on multifactorial
XX analysis of infertility-related mutations.
XX Claim 13; SEQ ID NO 407; 110pp; German.
XX This invention describes a novel method for investigating genetic
XX infertility or predisposition in males. The method involves selecting at
XX least two infertility-associated mutations which are recessive or
XX intermediate that are associated with infertility in the heterozygous
XX state and/or only in the homozygous state. Preferably at least one
XX azoospermia factor is detected which may be lost by microdeletions in
XX intervals 5 or 6 of the Y-chromosome. Also any of several hundred
XX mutations, listed, present in the cystic fibrosis transmembrane
XX conductance regulator (CTFR), Kallmann syndrome (KALI), androgen
XX resistance (AR) or steroid 21-hydroxylase (CYP21) genes may be detected.
XX Probes for the mutated genes and/or native nucleic acid, or their
XX complementary strands, are fixed to a carrier, particularly as a
XX microarray, then tested for hybridization with oligonucleotides from or
XX synthesized from, a patient sample and hybridization detected.
XX Multifactorial analysis is by standard statistical methods, particularly
XX the quantitative trait locus method. The method is used to diagnose
XX inherited male infertility or predisposition to its, especially in
XX conjunction with in vitro fertilization programs, e.g. for assessing
XX subjects with oligospermia for possible application of the
XX intracytoplasmic sperm injection method. Analysis of many mutations
XX improves diagnosis of the genetic basis of male infertility, including
XX polygenic origins (complex interactions between different heterozygotic
XX mutations). A chip for analyzing genetic infertility in males comprises
XX oligonucleotides that represent known mutations (nonsense or missense,
XX insertions, allelic variants deletions or rearrangements) in the cystic
XX fibrosis transmembrane conductance regulator, Kallmann syndrome, androgen
XX resistance and steroid 21-hydroxylase genes. ADD42140-ADD42633 represent
XX oligonucleotides used in the microarray described in the method of the
XX invention. NOTE: there are no SEQ ID's 133, 472 or 473 represented in the
XX SEQ ID list of the specification.
XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 1.8e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2051 AGTACTGCGACTGTC 2066
XX ||||| ||||| |||||
XX Db 1 ACTACTGCGACTGTC 16
XX
XX RESULT 2036
XX ADD96207/c
XX ID ADD96207 standard; DNA; 20 BP.
XX AC ADD96207;
XX DT 29-JAN-2004 (first entry)
XX DE Chicken ALAS1 gene probe generating forward PCR primer SEQ ID NO:31.
XX KW DR-4 nuclear receptor binding site; transcriptional enhancer;
XX 5-aminolevulinic acid synthase; enzyme; haem; P450 cytochrome; chicken;
XX enhancer; PCR primer; ss.
XX OS Synthetic.
XX OS Gallus gallus.
XX XX WO2003085113-A1.
XX TPN
XX XX 16-OCT-2003.
XX PD
XX XX 04-APR-2003; 2003WO-IB001414.
XX PF
XX XX 09-APR-2002; 2002WO-IB001258.
XX PR
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XX (UYBA-) UNIV BASEL.
XX Meyer UA, Fraser DJ, Kaufmann MR, Podvinec M, Zumsteg A;
XX WPI; 2003-877033/81.
XX
XX New transcriptional enhancer of the 5-aminolevulinic acid synthase gene,
XX useful for testing of chemical compounds as modulators of heme and/or
XX P450 cytochrome synthesis, comprises at least a DR-4 nuclear receptor
XX binding site.
XX
XX Disclosure; SEQ ID NO 31; 69pp; English.
XX
XX The present invention describes an isolated nucleic acid sequence
XX comprising at least a DR-4 nuclear receptor binding site, where the
XX nucleic acid sequence functions as transcriptional enhancer of the 5-
XX aminolevulinic acid synthase gene. Also described: (1) a genetic
XX construct comprising the above nucleic acid sequence operably linked to a
XX nucleic acid encoding a reporter molecule; and (2) a method for testing
XX compounds for modulation of haem and/or P450 cytochrome synthesis,
XX comprising contacting suitable cells comprising the above genetic
XX construct with a test compound and detecting enhanced or repressed
XX expression and/or transcription of the nucleic acid sequence encoding the
XX reporter gene. The nucleic acid or genetic construct can be used for
XX testing of chemical compounds as modulators of haem and/or P450
XX cytochrome synthesis. The present sequence represents a PCR primer used
XX in the generation of a probe for the chicken 5-aminolevulinic acid
XX synthase (ALAS1) gene, which is used in the exemplification of the
XX present invention.
XX
XX Sequence 20 BP; 5 A; 4 C; 10 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 1.8e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2145 CCACGACCTGCTGCCCC 2160
XX DB 17 CCTCGACCTGCTGCCCC 2
XX
XX RESULT 2037
XX ADE43758/c
XX ID ADE43758 standard; DNA; 20 BP.
XX
XX AC ADE43758;
XX
XX DT 29-JAN-2004 (first entry)
XX
XX DE Human TNFRSF6 sequencing primer, SEQ ID 363.
XX
XX KW Neurodegenerative disease; uPA; SNGG; IDE; KNSLI; LIPA; TNFRSF6;
XX Alzheimer's disease; neuroprotective; nootropic; gene therapy;
XX Chromosome 10; PCR; primer; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2003054143-A2.
XX
XX PD 03-JUL-2003.
XX
XX PF 25-OCT-2002; 2002WO-US034679.
XX
XX PR 25-OCT-2001; 2001US-0339525P.
XX PR 08-NOV-2001; 2001US-0336929P.
XX PR 08-NOV-2001; 2001US-0338010P.
XX PR 09-NOV-2001; 2001US-0338363P.
XX PR 04-DEC-2001; 2001US-0337052P.
XX PR 28-MAR-2002; 2002US-0368919P.
XX
XX (NEUR-) NEUROGENETICS INC.
XX (GEO) GEN HOSPITAL CORP.
XX
XX Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE, Bertram L;
XX Saunders AJ, Mullin KM, Sampson AJ, Blacker DL;
XX WPI; 2003-559131/52.
XX
XX Determining a predisposition for or the occurrence of neurodegenerative
XX disease, e.g. Alzheimer's disease by detecting in a target nucleic acid
XX the presence or absence of an allelic variant of one or more polymorphic
XX regions.
XX
XX Example 3; Page 300; 848pp; English.
XX
XX The present invention relates to a method (M1) for determining a
XX predisposition for or the occurrence of neurodegenerative disease in a
XX subject. The method comprises detecting in a target nucleic acid obtained
XX from the subject the presence or absence of an allelic variant of one or
XX more polymorphic regions of one or more genes selected from uPA
XX (Urokinase plasminogen activator), SNGG (gamma-synuclein), IDE (insulin-
XX degrading enzyme), KNSLI (Kinesin-like protein 1), LIPA (lysosomal acid
XX lyase), and TNFRSF6 (Tumour Necrosis Factor Receptor-SF6), where the
XX presence of at least one of the allelic variant of one or more
XX polymorphic regions is indicative of a predisposition for or the
XX occurrence of neurodegenerative disease. The genes are all located on
XX chromosome 10. M1 is useful for determining a predisposition for or the
XX occurrence of, and for treating neurodegenerative disease, particularly
XX Alzheimer's disease. The present sequence is a PCR primer, which was used
XX in the method of the invention.
XX
XX Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 1.8e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2214 ACAATGTGAGGGTCC 2229
XX DB 19 ACAATGTGAGGGTCC 4
XX
XX RESULT 2038
XX ADF18169/c
XX ID ADF18169 standard; DNA; 20 BP.
XX
XX AC ADF18169;
XX
XX DT 12-FEB-2004 (first entry)
XX
XX DE 5-Aminolevulinic acid synthase ALAS1 gene forward PCR primer.
XX
XX KW 5-Aminolevulinic acid synthase; enzyme; enhancer; chicken; ADRES;
XX ALAS1 gene; PCR; primer; ss.
XX
XX OS Gallus gallus.
XX
XX PN WO2003085112-A1.
XX
XX PD 16-OCT-2003.
XX
XX PF 09-APR-2002; 2002WO-IB001258.
XX
XX PR 09-APR-2002; 2002WO-IB001258.
XX
XX (UYBA-) UNIV BASEL.
XX
XX Meyer UA, Fraser DJ, Kaufmann MR, Podvinec M, Zumsteg A;
XX WPI; 2003-877032/81.
XX
XX New transcriptional enhancer of the 5-aminolevulinic acid synthase gene,
XX useful for testing of chemical compounds as modulators of heme and/or
XX P450 cytochrome synthesis, comprises at least a DR-4 nuclear receptor
XX binding site.
XX
XX Disclosure; SEQ ID NO 31; 69pp; English.
XX
XX The present invention describes an isolated nucleic acid sequence
XX comprising at least a DR-4 nuclear receptor binding site, where the
XX nucleic acid sequence functions as transcriptional enhancer of the 5-
XX aminolevulinic acid synthase gene. Also described: (1) a genetic
XX construct comprising the above nucleic acid sequence operably linked to a
XX nucleic acid encoding a reporter molecule; and (2) a method for testing
XX compounds for modulation of haem and/or P450 cytochrome synthesis,
XX comprising contacting suitable cells comprising the above genetic
XX construct with a test compound and detecting enhanced or repressed
XX expression and/or transcription of the nucleic acid sequence encoding the
XX reporter gene. The nucleic acid or genetic construct can be used for
XX testing of chemical compounds as modulators of haem and/or P450
XX cytochrome synthesis. The present sequence represents a PCR primer used
XX in the generation of a probe for the chicken 5-aminolevulinic acid
XX synthase (ALAS1) gene, which is used in the exemplification of the
XX present invention.
XX
XX Sequence 20 BP; 5 A; 4 C; 10 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 1.8e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2145 CCACGACCTGCTGCCCC 2160
XX DB 17 CCTCGACCTGCTGCCCC 2
XX
XX RESULT 2037
XX ADE43758/c
XX ID ADE43758 standard; DNA; 20 BP.
XX
XX AC ADE43758;
XX
XX DT 29-JAN-2004 (first entry)
XX
XX DE Human TNFRSF6 sequencing primer, SEQ ID 363.
XX
XX KW Neurodegenerative disease; uPA; SNGG; IDE; KNSLI; LIPA; TNFRSF6;
XX Alzheimer's disease; neuroprotective; nootropic; gene therapy;
XX Chromosome 10; PCR; primer; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2003054143-A2.
XX
XX PD 03-JUL-2003.
XX
XX PF 25-OCT-2002; 2002WO-US034679.
XX
XX PR 25-OCT-2001; 2001US-0339525P.
XX PR 08-NOV-2001; 2001US-0336929P.
XX PR 08-NOV-2001; 2001US-0338010P.
XX PR 09-NOV-2001; 2001US-0338363P.
XX PR 04-DEC-2001; 2001US-0337052P.
XX PR 28-MAR-2002; 2002US-0368919P.
XX
XX (NEUR-) NEUROGENETICS INC.
XX (GEO) GEN HOSPITAL CORP.
XX

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XX Disclosure; SEQ ID NO 31; 57pp; English.

XX The present sequence is that of a forward PCR primer for the chicken

CC aminolevulinic acid synthase (ALAS1) gene. The primer was used to

CC generate a probe for ALAS1, in a PCR using chicken embryo liver genomic

CC DNA as template. ALAS1 drug responsive enhancer sequences (ADRES) have

CC been identified ADF18139-ADP18140. These include DR4 and DR5 nuclear

CC receptor binding sites. An isolated nucleic acid sequence, such as the

CC ADRES sequence, that comprises at least a DR4 site is claimed. A claimed

CC genetic construct comprises the nucleic acid sequence and a reporter

CC gene. It is used in a claimed method to test candidate drug compounds for

CC modulation of haem and/or cytochrome P450 synthesis. Cells comprising the

CC genetic construct are contacted with the test compound, and

CC enhanced/reduced expression and/or transcription of the reporter gene is

CC detected.

XX Sequence 20 BP; 5 A; 4 C; 10 G; 1 T; 0 U; 0 Other;

SQ Query Match 0.4%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 1.8e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2145 CCACGACCTGCTGCC 2160

DB 17 CCTCGACCTGCTGCC 2

RESULT 2039

ADFS3079/c

ID ADFS3079 standard; DNA; 20 BP.

XX ADFS3079;

XX 12-FEB-2004 (first entry)

DT Variant detecting primer extension assay extension primer, SEQ ID No 35.

DE variant detection; primer extension assay; mutation; cancer;

XX heterogeneous; sporadic mutation; genotyping; pooled sample; primer; ss.

XX Unidentified.

OS WO2003071252-A2.

PN 28-AUG-2003.

XX 18-FEB-2003; 2003WO-US004827.

XX 15-FEB-2002; 2002US-0357585P.

PR (EXAC-) EXACT SCI CORP.

PA Shuber AP, Kann L, Whitney D;

PI WPI; 2003-697649/66.

DR Detecting a variant in a primer extension assay, useful for analyzing

PT molecular events for identifying mutations indicative of cancer, by

PT contacting a target nucleic acid primer complementary to a region of the

PT target nucleic acid.

XX Example 5; SEQ ID NO 35; 54pp; English.

PS The invention relates to a novel method for detecting a variant in a

XX primer extension assay, useful for analysing molecular events for

CC identifying mutations indicative of cancer, by contacting a target

CC nucleic acid primer complementary to a region of the target nucleic acid.

CC Detecting a variant in a primer extension assay comprises contacting a

CC target nucleic acid primer complementary to a region of the target

CC nucleic acid, and extending the primer in the presence of a first

CC nucleotide that is complementary to a first variant nucleotide suspected

CC to be at a position downstream of the region and a second nucleotide that

CC is complementary to a second variant nucleotide at the position, thus to

CC reduce misincorporation of the first nucleotide on a template comprising

CC the second variant nucleotide. The methods are useful for analysing

CC molecular events for identifying individuals with mutations indicative of

CC cancer. They are particularly useful in detecting a rare mutation in a

CC heterogeneous biological sample (e.g. sporadic mutation in a

CC heterogeneous patient sample), detecting rare genotypes in genotyping

CC reactions (e.g. viral genotyping reactions), or detecting mutant or viral

CC sequences in pooled samples (e.g. detecting polymorphisms or inherited

CC sequence variations in pooled patient samples). This polynucleotide

CC sequence represents a primer used as part of the primer extension assay

CC of the invention.

XX Sequence 20 BP; 5 A; 12 C; 0 G; 3 T; 0 U; 0 Other;

SQ Query Match 0.4%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 1.8e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 856 GAGGAGCTGCTGGAGG 871

DB 18 GAGGAGCTGCTGGAGG 3

RESULT 2040

ABZ85455/c

ID ABZ85455 standard; DNA; 20 BP.

XX ABZ85455;

XX 17-OCT-2003 (first entry)

DT Human oligonucleotide sequence.

DE Human; antisense; lung dysfunction; nasal airway dysfunction;

XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

XX antisense gene therapy; respiratory; lung; adenosine sensitivity;

XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS WO200285308-A2.

PN 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

PR (EPIG-) EPIGENESIS PHARM INC.

PA Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

DR Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiquinone.

XX Claim 15; SEQ ID NO 697; 872pp; English.

PS The invention relates to a novel pharmaceutical composition, which has a

XX first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or
 CC receptor, producing bronchodilation, increasing levels of ubiqunone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 10 A; 3 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3258 AAGATATTTTATTGTC 3273
 ||| ||||| |||||
 Db 16 AAGTATTTTATTGTC 1

RESULT 2041

ABZ99173
 ID ABZ99173 standard; DNA; 20 BP.

AC ABZ99173;

DT 17-OCT-2003 (first entry)

DE Human PDE4C oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

PI WPI; 2003-229219/22.

XX

XX Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiqunone.

XX

XX Disclosure; SEQ ID NO 14415; 872pp; English.

PS

XX The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiqunone. A composition of the invention

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CC immunosuppressive, and cytostatic activity. The composition may have a
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 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or
 CC receptor, producing bronchodilation, increasing levels of ubiqunone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 1.8e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1410 CACGCAGGGCGGGCCC 1425
 ||||| ||||| |||||
 Db 1 CACGCAGGGCGGGCCC 16

RESULT 2042

ABZ86691

ID ABZ86691 standard; DNA; 20 BP.

AC ABZ86691;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

PI WPI; 2003-229219/22.

XX

XX Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiqunone.

XX

XX Claim 15; SEQ ID NO 1933; 872pp; English.

PS

XX The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

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CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubi quinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2633 CACATGTCAGCACCT 2648
 |||||
 Db 1 CACATGTCAGCATCT 16

RESULT 2043
 ABZ89955/c
 ID ABZ89955 standard; DNA; 20 BP.

XX AC ABZ89955;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubi quinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX XX WO200285308-A2.

XX XX 31-OCT-2002.

XX XX 23-APR-2002; 2002WO-US013135.

XX XX 24-APR-2001; 2001US-0286137P.

XX XX (EPITG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific-gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubi quinone.

XX PS Disclosure; SEQ ID NO 5197; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubi quinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubi quinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 1 A; 4 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 1.8e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2103 CACCCCAGCTCCAGC 2118
 |||||
 Db 20 CAGCCCAGCTCCAGC 5

RESULT 2044

ABZ86363/c

ID ABZ86363 standard; DNA; 20 BP.

XX AC ABZ86363;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubi quinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX XX WO200285308-A2.

XX XX 31-OCT-2002.

XX XX 23-APR-2002; 2002WO-US013135.

XX XX 24-APR-2001; 2001US-0286137P.

XX XX (EPITG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubi quinone.

XX PS Claim 15; SEQ ID NO 1605; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubi quinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 4 A; 8 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 1394 ACCTGCTGGCGCCTG 1409
 Db 19 ACCTGCTGGCACCTG 4
 RESULT 2045
 ABZ85454/C
 ID ABZ85454 standard; DNA; 20 BP.
 XX
 AC ABZ85454;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIC-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Claim 15; SEQ ID NO 696; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 14 A; 2 C; 1 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 OY 3260 GATATTTTATTGCTT 3275
 Db 20 GTTATTTTATTGCTT 5
 RESULT 2046
 ABZ91734/C
 ID ABZ91734 standard; DNA; 20 BP.
 XX
 AC ABZ91734;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIC-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Disclosure; SEQ ID NO 6976; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

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CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 12 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2829 TACATATATATATATA 2844
Db 19 TTCATATATATATATA 4
RESULT 2047
ABZ86378
ID ABZ86378 standard; DNA; 20 BP.
XX
AC ABZ86378;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 1620; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 5 A; 6 C; 9 G; 0 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 659 GCAGCAAGGTGGGCC 674
Db 5 GCAGCAAGGTGGGCC 20
RESULT 2048
ABZ88135
ID ABZ88135 standard; DNA; 20 BP.
XX
AC ABZ88135;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 3377; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction.
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 993 GGGCTCCCCCACCCTG 1008
 DB 2 GGGCTCCACCACCTG 17

RESULT 2049
 AB291731/C
 ID AB291731 standard; DNA; 20 BP.

XX AC AB291731;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

PS Disclosure; SEQ ID NO 6973; 872bp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
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CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction.
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 10 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2829 TACATATATATATATA 2844
 DB 19 TTTCATATATATATATA 4

RESULT 2050
 AAD47315/C
 ID AAD47315 standard; DNA; 20 BP.

XX AC AAD47315;

DT 24-FEB-2003 (first entry)

DE Human RT-PCR reverse primer for synaptophysin DNA isolation.

XX Human; insulin-secreting cell; neurogenin 3; ngn3; precursor stem cell;
 KW pancreatic exocrine cell; transplantation; RT-PCR; primer; ss.

XX Homo sapiens.

XX WO200274946-A2.

XX 26-SEP-2002.

XX 26-FEB-2002; 2002WO-DK000130.

XX 26-FEB-2001; 2001US-0271474P.

XX (NOVO) NOVO NORDISK AS.

XX Serup P, Heimberg H, Gradwohl G;

XX WPI; 2003-018804/01.

XX Generating insulin-secreting cells from precursor stem cells or adult
 PT pancreatic exocrine cells, for generating glucose sensitive insulin
 PT secreting beta cells for transplantation, comprises using neurogenin3 or
 PT NeuroD/beta2.

PS Example 5B; Page 36; 66pp; English.

XX The invention relates to a method for generating insulin-secreting cells
 CC from precursor stem cells or adult pancreatic exocrine cells. The method
 CC comprises exposing the precursor cells or exocrine cells to: a nucleic
 CC acid molecule encoding neurogenin 3 (ngn3) or NeuroD/beta2; or an
 CC activator of ngn3 or NeuroD/beta2 gene expression, under conditions
 CC effective to generate the insulin-generating cells from the precursor or
 CC exocrine cells. The invention is useful in generating insulin-secreting
 CC cells from precursor stem cells or adult pancreatic exocrine cells is
 CC useful for generating glucose sensitive insulin secreting beta cells
 CC suitable for transplantation, and for in situ development of insulin-
 CC secreting cells in a patient. The method is also useful for preventing
 CC premature differentiation of precursor stem cells into insulin-secreting
 CC beta cells and for identifying compounds that prevent or activate beta

```
CC cell differentiation. The present sequence is human RT-PCR primer for
CC isolation of synaptophysin DNA
XX
SQ Sequence 20 BP; 7 A; 6 G; 6 G; 1 T; 0 U; 0 Other;
    Query Match      0.4%; Score 14.4; DB 1; Length 20;
    Best Local Similarity 93.8%; Pred. No. 1.8e+03;
    Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1281 TGTACCGTAGCCGTG 1296
Db      ||||| ||||| |||||
      17 TGTACCGTAGCCGTG 2

RESULT 2051
ADM34346
ID ADM34346 standard; DNA; 20 BP.
XX
AC ADM34346;
XX
DT 03-JUN-2004 (first entry)
XX
DE Human cryopyrin cDNA sequence primer #18.
XX
KW ss; primer; antiinflammatory; cryopyrin; inflammation;
KW Familial cold urticaria; familial cold autoinflammatory syndrome;
KW Muckle Wells Syndrome.
XX
OS Homo sapiens.
XX
PN WO200301639-A2.
XX
PD 17-APR-2003.
XX
PF 04-OCT-2002; 2002WO-US031502.
XX
PR 05-OCT-2001; 2001US-0327728P.
XX
PA (LUDW-) LUDWIG INST CANCER RES.
XX
PI Hoffman H, Kolodner R;
XX
WPI; 2003-393448/37.
XX
PT New isolated cryopyrin protein and encoding nucleic acid, useful for
PT diagnosing and treating inflammatory disorders, in particular familial
PT cold urticaria, familial cold autoinflammatory syndrome and/or Muckle
PT Wells Syndrome.
XX
PS Example 2; SEQ ID NO 18; 36bp; English.
XX
CC The invention relates to a novel isolated protein (I) comprises the amino
CC acid sequence of wild type cryopyrin of 1034 amino acids, with the
CC proviso that amino acid 198 is not Val, amino acid 352 is not Ala, amino
CC acid 434 is not Ala, amino acid 627 is not Glu, or amino acid 703 is not
CC Gln. The methods are useful for determining the presence of a disorder,
CC treating inflammation. Familial cold urticaria/familial cold
CC autoinflammatory syndrome (FCU/FCAS) or Muckle Wells Syndrome (MWS), and
CC identifying a substance useful in modulating binding of a cryopyrin
CC protein to a second protein. The oligonucleotide is useful in diagnosing
CC a disorder characterized by an aberrant CIAS1 gene. This sequence
CC corresponds to a primer used to amplify the cryopyrin gene of the
CC invention.
XX
SQ Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
    Query Match      0.4%; Score 14.4; DB 1; Length 20;
    Best Local Similarity 93.8%; Pred. No. 1.8e+03;
    Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2303 CACAGAGCTTGTGCT 2318
Db      ||||| ||||| |||||
      2 CACAGAGCTTGTGCT 17
```

```
RESULT 2052
ABD22608
ID ABD22608 standard; DNA; 20 BP.
XX
AC ABD22608;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human cathepsin C-derived oligo SEQ ID 1620.
XX
DE Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 1620; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
```

CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 5 A; 6 C; 9 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 659 GCAGCAAGTGGGCC 674
 Db 5 GCAGCAAGTGGGCC 20
 RESULT 2053
 ABD26185/c
 ID ABD26185 standard; DNA; 20 BP.
 XX
 AC ABD26185;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE R49144-derived oligonucleotide SEQ ID 5197.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIC-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 5197; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system of
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 1 A; 4 C; 9 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2103 CACCCCGAGCTCCAGC 2118
 Db 20 CACCCCGAGCTCCAGC 5
 RESULT 2054
 ABD22921
 ID ABD22921 standard; DNA; 20 BP.
 XX
 AC ABD22921;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Human myosin X-derived oligonucleotide SEQ ID 1933.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIC-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 1933; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production

CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2633 CACATGTCAGACCT 2648
 Db 1 CACATGTCAGACCT 16

RESULT 2055
 ABD24365
 ID ABD24365 standard; DNA; 20 BP.

XX ABD24365;

XX 29-JUL-2004 (first entry)

DE AI672565-derived oligonucleotide SEQ ID 3377.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US011343.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 3377; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX

SQ Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 993 GGCTCCACCGTG 1008

Db 2 GGCTCCACCGTG 17

RESULT 2056

ABD21684/c

ID ABD21684 standard; DNA; 20 BP.

XX ABD21684;

XX 29-JUL-2004 (first entry)

DE Human stanniocalcin-derived oligo SEQ ID 696.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.


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RESULT 2058
ABD27961/c
ID ABD27961 standard; DNA; 20 BP.
XX
AC ABD27961;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA497002-derived oligonucleotide SEQ ID 6973.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 6973; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

```

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CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 10 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2829 TACATATATATATATA 2844
DB 19 TTCATATATATATATA 4
RESULT 2059
ABD21685/c
ID ABD21685 standard; DNA; 20 BP.
XX
AC ABD21685;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human stannocalcin-derived oligo SEQ ID 697.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 697; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to

```

CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 10 A; 3 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3258 AGCATATTTTATTGTC 3273
DB 16 AGCTTATTATTGTC 1
|||||
|||

RESULT 2060
ABD22593/C
ID ABD22593 standard; DNA; 20 BP.
XX
AC ABD22593;
XX
XX
29-JUL-2004 (first entry)
DE Human cathepsin C-derived oligo SEQ ID 1605.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 1605; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The

CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer,
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 4 A; 8 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1394 ACCTGCTGGCGCCTG 1409
DB 19 ACCTGCTGGCGCCTG 4
|||||
|||||

RESULT 2061
ABD27964/C
ID ABD27964 standard; DNA; 20 BP.
XX
XX ABD27964;
AC
XX
XX 29-JUL-2004 (first entry)
DE
XX
XX AA97002-derived oligonucleotide SEQ ID 6976.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX

PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX
 PS Claim 15; SEQ ID NO 6976; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 XX Sequence 20 BP; 12 A; 0 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 1.8e+03;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2829 TACATATATATATATA 2844
 DB 19 TTCTATATATATATA 4

RESULT 2062
 ADG27988/c
 ID ADG27988 standard; DNA; 20 BP.

XX ADG27988;

DT 11-MAR-2004 (first entry)

XX Rice variety-related PCR primer SeqID103.

XX rice variety; rice genome; quality control; adulterant detection;
 KW small trader protection; consumers protection; PCR; primer; ss.

XX Oryza sativa.

XX WO2003104491-A1.

PN 18-DEC-2003.

XX 10-JUN-2003; 2003WO-JP007332.

XX 10-JUN-2002; 2002JP-00168875.

XX (PLAN-) PLANT GENOME CENT CO LTD.

PA (NAG-) NAT AGRIC RES ORG JAPAN.

XX Minobe Y, Monna L, Suzuki J, Ohta R, Nemoto H, Ideta O;

XX WPI; 2004-053624/05.

XX Distinguishing rice varieties based on polymorphism sites as markers to
 PT show different patterns in combination, useful in distinguishing and
 PT specifying varieties for quality control.

XX Disclosure; SEQ ID NO 103; 193pp; Japanese.

XX This invention relates to a novel method of distinguishing rice varieties
 CC which comprises judging base types at any of 28 sites selected from the
 CC rice genome, or of the bases in these sites of base pairs of the bases at
 CC such sites in the complementary strand and relating the judged base types
 CC with the rice variety. The method is useful in distinguishing and
 CC specifying varieties analogous to each other at DNA level for quality
 CC control of 24 rice varieties, to detect adulterants and mixing with
 CC cheaper varieties for protection of small traders and consumers.

XX Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 1.8e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1136 TCTCCGAGCTCGAGCT 1151

DB 16 TTCTCGAGCTCGAGCT 1

RESULT 2063

ADH54236/c

ID ADH54236 standard; DNA; 20 BP.

XX ADH54236;

XX 25-MAR-2004 (first entry)

XX Human neurodegenerative disease-related sequencing primer SeqID363.

XX human; neurodegenerative disease; uronase plasminogen activator; uPA;
 KW gamma-synuclein; SNCG; insulin degrading enzyme; IDE;
 KW kinesin-like protein 1; KNSL1; lysosomal acid lipase; LIPA;
 KW tumour necrosis factor receptor SF6; TNFRSF6; Alzheimer's disease; PCR;
 KW primer; ss; sequencing.

XX Homo sapiens.

XX US2003224380-A1.

XX 04-DEC-2003.

XX 25-OCT-2002; 2002US-00282174.

XX 25-OCT-2001; 2001US-0339525P.

XX 02-NOV-2001; 2001US-0348065P.

XX 08-NOV-2001; 2001US-0336983P.

XX 08-NOV-2001; 2001US-0336929P.

XX 09-NOV-2001; 2001US-0338010P.

XX 04-DEC-2001; 2001US-0338363P.

XX 28-MAR-2002; 2002US-0368919P.

XX (GEHO) GEN HOSPITAL CORP.

XX Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE;

XX Bertram L, Saunders AJ, Mullin KM, Sampson AJ;

XX WPI; 2004-060538/06.

XX Determining a predisposition for or the occurrence of neurodegenerative

PT disease, particularly Alzheimer's disease, comprises determining the
PT presence of a polymorphism in the UPA, SNCG, IDE, KNSLI, LIPA or TNFRSF6
PT gene.

PS Example 3; SEQ ID NO 363; 205pp; English.

XX This invention relates to a novel method of determining a predisposition
CC for the occurrence of neurodegenerative disease comprising detecting
CC in a target nucleic acid obtained from the subject the presence of an
CC allelic variant of polymorphic regions of human genes selected from
CC urokinase plasminogen activator (uPA), gamma-synuclein (SNCG), insulin
CC degrading enzyme (IDE), kinesin-like protein 1 (KNSLI), lysosomal acid
CC lipase (LIPA) and tumour necrosis factor receptor SF6 (TNFRSF6). The
CC method is useful in determining the presence or predisposition to a
CC neurodegenerative disease, particularly Alzheimer's disease. The present
CC sequence is that of a sequencing primer which was used for sequencing of
CC a region of the human TNFRSF6 gene in the exemplification of the
CC invention.

XX Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2214 ACAATGTGAGGGTCC 2229
DB 19 ACAATGTGAGGGTCC 4

RESULT 2064
ADH63318
ID ADH63318 standard; DNA; 20 BP.

XX AC ADH63318;

XX DT 25-MAR-2004 (first entry)

XX Human glucocorticoid receptor-specific antisense oligonucleotide #152.

XX antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX OS Homo sapiens.

XX PN WO2003099215-A2.

XX PD 04-DEC-2003.

XX PF 20-MAY-2003; 2003WO-US016084.

XX PR 20-MAY-2002; 2002US-0381857P.

XX PA (PHAA) PHARMACIA CORP.

XX PI Crosby SD, Nalseth AE;

XX WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.

XX Claim 4; SEQ ID NO 152; 985pp; English.

XX The invention comprises an antisense oligonucleotide that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The

CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX Sequence 20 BP; 4 A; 0 C; 6 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3321 GAGATTATTATTTTGG 3336
DB 3 GAGATTATTATTTTGG 18

RESULT 2065
ADH63302
ID ADH63302 standard; DNA; 20 BP.

XX AC ADH63302;

XX DT 25-MAR-2004 (first entry)

XX Human glucocorticoid receptor-specific antisense oligonucleotide #136.

XX antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX OS Homo sapiens.

XX PN WO2003099215-A2.

XX PD 04-DEC-2003.

XX PF 20-MAY-2003; 2003WO-US016084.

XX PR 20-MAY-2002; 2002US-0381857P.

XX PA (PHAA) PHARMACIA CORP.

XX Crosby SD, Nalseth AE;

XX WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.

XX Claim 4; SEQ ID NO 136; 985pp; English.

XX The invention comprises an antisense oligonucleotide that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX Sequence 20 BP; 5 A; 0 C; 6 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3321 GAGATTATTATTTTGG 3336
DB 2 GAGATTATTATTTTGG 17

XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS Claim 4; SEQ ID NO 782; 985pp; English.
XX
CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 5 A; 0 C; 6 G; 9 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3321 GAGATTATTATTTGG 3336
Db 1 GAGATTAGTTTTGG 16
RESULT 2069
ADK96202/c
ID ADK96202 standard; DNA; 20 BP.
AC ADK96202;
XX
XX 06-MAY-2004 (first entry)
DE Primer of the invention #1922.
KW human; single nucleotide polymorphism; SNP; ss; primer.
XX Synthetic.
OS
PN JP2003259875-A.
XX
PD 16-SEP-2003.
XX
PF 08-MAR-2002; 2002JP-00064373.
XX
PR 08-MAR-2002; 2002JP-00064373.
XX
PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
XX WPI; 2004-093977/10.
XX
XX Novel polynucleotide useful for PCR amplification along with two DNA
PT fragment from another set of sequences, or for detecting single
PT nucleotide polymorphism in human gene.
XX
PS Claim 2; SEQ ID NO 5231; 2627pp; Japanese.
CC
CC The present invention relates to a polynucleotide isolated from a human
CC gene and is useful for detecting a single nucleotide polymorphism in a
CC human gene or for diagnosing of disease. The invention enables the
CC detection of a single nucleotide polymorphism in a human gene. The
CC present sequence represents a primer of the invention.
XX
SQ Sequence 20 BP; 8 A; 9 C; 3 G; 0 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2316 TCTGTGTGTGTGTG 2331

Db 19 TCTGTGTGTGTGTG 4
RESULT 2070
ADK98028/c
ID ADK98028 standard; DNA; 20 BP.
AC ADK98028;
XX
XX 06-MAY-2004 (first entry)
DE Primer of the invention #3748.
XX
XX human; single nucleotide polymorphism; SNP; ss; primer.
XX Synthetic.
OS
PN JP2003259875-A.
XX
PD 16-SEP-2003.
XX
PF 08-MAR-2002; 2002JP-00064373.
XX
PR 08-MAR-2002; 2002JP-00064373.
XX
PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
XX WPI; 2004-093977/10.
XX
XX Novel polynucleotide useful for PCR amplification along with two DNA
PT fragment from another set of sequences, or for detecting single
PT nucleotide polymorphism in human gene.
XX
PS Claim 2; SEQ ID NO 7057; 2627pp; Japanese.
CC
CC The present invention relates to a polynucleotide isolated from a human
CC gene and is useful for detecting a single nucleotide polymorphism in a
CC human gene or for diagnosing of disease. The invention enables the
CC detection of a single nucleotide polymorphism in a human gene. The
CC present sequence represents a primer of the invention.
XX
SQ Sequence 20 BP; 2 A; 9 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 868 GAGGCTGACGAGCGG 883
Db 16 GAGGATGACGAGCGG 1
RESULT 2071
ADJ61058
ID ADJ61058 standard; DNA; 20 BP.
AC ADJ61058;
XX
XX 06-MAY-2004 (first entry)
DE Oligonucleotide associated to PDE4C #124.
XX
XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW airway inflammation; allergy; asthma; impeded respiration;
KW cystic fibrosis; acute respiratory distress syndrome;
KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW ss.
XX
XX Homo sapiens.
OS
XX
PN WO2004011613-A2.
XX

PD 05-FEB-2004.
XX
PF 25-JUL-2003; 2003WO-US023509.
XX
PR 29-JUL-2002; 2002US-0399076P.
XX
PA (EPIC-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
XX WPI; 2004-203534/19.
DR
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codons and introns of respiratory disease-relevant genes e.g.,
PT CCRI, RANTES, MCPA, useful for prophylaxis or treating respiratory
PT disease e.g., asthma.
XX
PS Claim 2; SEQ ID NO 1914; 85pp; English.
XX
CC The present invention relates to an oligonucleotide anti-sense to e.g.,
CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC end of nucleic acid target comprising gene(s) chosen from e.g.
CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC oligonucleotide and optionally surfactant operatively linked to the
CC oligonucleotide. The method is useful for preventing or treating a
CC respiratory or lung disease, which involves administering to the airways
CC of a subject an effective amount of an inhibitor. The oligonucleotide is
CC useful for production of a medicament for the prevention and/or treatment
CC of a respiratory or lung disease. The respiratory or lung disease is
CC chosen from airway inflammation, allergy(ies), asthma, impeded
CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC obstruction. The present sequence represents an oligonucleotide of the
XX invention.
XX
SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1410 CACGACGGGGGGGGCC 1425
Db 1 CACGACGGGGGGGGCC 16
RESULT 2072
ADK73614
ID ADK73614 standard; DNA; 20 BP.
XX
AC ADK73614;
XX
XX 20-MAY-2004 (first entry)
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #948.
DE
DE Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
XX 26-FEB-2004.
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #948.
DE
DE Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
XX 26-FEB-2004.
XX
XX 14-AUG-2003; 2003WO-US025465.
PF
PF 14-AUG-2002; 2002US-0403416P.
PR
XX (PHAA) PHARMACIA CORP.
PA

XX Roberds SL;
PI
XX WPI; 2004-203785/19.
DR
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 948; 417pp; English.
PS
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 1 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 917 TGGGCTTCCTCTGTT 932
Db 1 TGGGCTTCCTCTGTT 16
RESULT 2073
ADK80009/C
ID ADK80009 standard; DNA; 20 BP.
XX
AC ADK80009;
XX
XX 20-MAY-2004 (first entry)
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #7343.
DE
DE Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
XX 26-FEB-2004.
XX
XX 14-AUG-2003; 2003WO-US025465.
PF
XX 14-AUG-2002; 2002US-0403416P.
PR
XX (PHAA) PHARMACIA CORP.
PA
XX Roberds SL;
PI
XX WPI; 2004-203785/19.
DR
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX

PS Claim 4; SEQ ID NO 7343; 417pp; English.

XX The present invention relates to an antisense compound targeted to a

CC nucleic acid molecule encoding Nav1.3, where the antisense compound

CC specifically hybridizes with and inhibits the expression of Nav1.3. The

CC compound and composition are useful for treating a disease or condition

CC associated with Nav1.3, e.g. pain including but not limited to

CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,

CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,

CC pain from burns, migraine headache, cluster headache, mild-to-moderate

CC headache; seizure disorder such as childhood seizure disorder, including

CC but not limited to neonatal or infantile epilepsy; or ataxia. The present

CC sequence represents a chimeric phosphorothioate oligonucleotide with

CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of

CC human Nav1.3 expression, the oligonucleotides are designed to target

CC different regions of the human Nav1.3 RNA.

XX

SQ Sequence 20 BP; 11 A; 1 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 1.8e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 3261 ATATTTTATTGCTTT 3276

DB 20 ATATTTTATTGCTT 5

RESULT 2074

ADK73997

ID ADK73997 standard; DNA; 20 BP.

XX

AC ADK73997;

XX

XX

DT 20-MAY-2004 (first entry)

XX

DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1331.

XX

XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;

KW diabetic neuropathy; arthritic pain; migraine headache;

KW infantile epilepsy; ataxia; ss.

XX

OS Synthetic.

XX

XX WO2004016754-A2.

XX

PD 26-FEB-2004.

XX

PF 14-AUG-2003; 2003WO-US025465.

XX

PR 14-AUG-2002; 2002US-0403416P.

XX

XX (PHAA) PHARMACIA CORP.

PA

XX

PI Robert's SL;

XX

XX WPI; 2004-203785/19.

XX

XX New antisense compound targeted to a nucleic acid molecule encoding

PT Nav1.3, useful for treating a disease or condition associated

PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure

PT disorder, or ataxia.

XX

PS Claim 4; SEQ ID NO 1331; 417pp; English.

XX

XX The present invention relates to an antisense compound targeted to a

CC nucleic acid molecule encoding Nav1.3, where the antisense compound

CC specifically hybridizes with and inhibits the expression of Nav1.3. The

CC compound and composition are useful for treating a disease or condition

CC associated with Nav1.3, e.g. pain including but not limited to

CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,

CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,

CC pain from burns, migraine headache, cluster headache, mild-to-moderate

CC headache; seizure disorder such as childhood seizure disorder, including

CC but not limited to neonatal or infantile epilepsy; or ataxia. The present

CC sequence represents a chimeric phosphorothioate oligonucleotide with

CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of

CC human Nav1.3 expression, the oligonucleotides are designed to target

CC different regions of the human Nav1.3 RNA.

XX

SQ Sequence 20 BP; 1 A; 6 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 1.8e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 917 TGGGCTTCTTCCTGTT 932

DB 5 TGAGCTTCTTCCTGTT 20

RESULT 2075

ADK74453

ID ADK74453 standard; DNA; 20 BP.

XX

AC ADK74453;

XX

DT 20-MAY-2004 (first entry)

XX

DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1787.

XX

XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;

KW diabetic neuropathy; arthritic pain; migraine headache;

KW infantile epilepsy; ataxia; ss.

XX

OS Synthetic.

XX

XX WO2004016754-A2.

XX

PD 26-FEB-2004.

XX

PF 14-AUG-2003; 2003WO-US025465.

XX

PR 14-AUG-2002; 2002US-0403416P.

XX

XX (PHAA) PHARMACIA CORP.

PA

XX

PI Robert's SL;

XX

XX WPI; 2004-203785/19.

XX

XX New antisense compound targeted to a nucleic acid molecule encoding

PT Nav1.3, useful for treating a disease or condition associated

PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure

PT disorder, or ataxia.

XX

PS Claim 4; SEQ ID NO 1787; 417pp; English.

XX

XX The present invention relates to an antisense compound targeted to a

CC nucleic acid molecule encoding Nav1.3, where the antisense compound

CC specifically hybridizes with and inhibits the expression of Nav1.3. The

CC compound and composition are useful for treating a disease or condition

CC associated with Nav1.3, e.g. pain including but not limited to

CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,

CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,

CC pain from burns, migraine headache, cluster headache, mild-to-moderate

CC headache; seizure disorder such as childhood seizure disorder, including

CC but not limited to neonatal or infantile epilepsy; or ataxia. The present

CC sequence represents a chimeric phosphorothioate oligonucleotide with

CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of

CC human Nav1.3 expression, the oligonucleotides are designed to target

CC different regions of the human Nav1.3 RNA.

XX

SQ Sequence 20 BP; 1 A; 6 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;

```
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 917 TGGGCTTCTTCCTGTT 932
DB 4 TGAGCTTCTTCCTGTT 19

RESULT 2076
ADK76076
ID ADK76076 standard; DNA; 20 BP.
XX AC ADK76076;
XX DT 20-MAY-2004 (first entry)
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #3410.
XX KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX KW diabetic neuropathy; arthritic pain; migraine headache;
XX KW infantile epilepsy; ataxia; ss.
XX OS Synthetic.
XX PN WO2004016754-A2.
XX PD 26-FEB-2004.
XX PF 14-AUG-2003; 2003WO-US025465.
XX PR 14-AUG-2002; 2002US-0403416P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Roberds SL;
XX DR WPI; 2004-203785/19.
XX PT New antisense compound targeted to a nucleic acid molecule encoding
XX PT Nav1.3, useful for treating a disease or condition associated
XX PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX PT disorder, or ataxia.
XX PS Claim 4; SEQ ID NO 3410; 417pp; English.
XX CC The present invention relates to an antisense compound targeted to a
XX CC nucleic acid molecule encoding Nav1.3, where the antisense compound
XX CC specifically hybridizes with and inhibits the expression of Nav1.3. The
XX CC compound and composition are useful for treating a disease or condition
XX CC associated with Nav1.3, e.g. pain including but not limited to
XX CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX CC pain from burns, migraine headache, cluster headache, mild-to-moderate
XX CC headache; seizure disorder such as childhood seizure disorder, including
XX CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX CC sequence represents a chimeric phosphorothioate oligonucleotide with
XX CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
XX CC human Nav1.3 expression, the oligonucleotides are designed to target
XX CC different regions of the human Nav1.3 RNA.
XX SQ Sequence 20 BP; 1 A; 6 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 917 TGGGCTTCTTCCTGTT 932
DB 2 TGAGCTTCTTCCTGTT 17

RESULT 2077
ADK78254
ID ADK78254 standard; DNA; 20 BP.
XX AC ADK78254;
XX DT 20-MAY-2004 (first entry)
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #5588.
XX KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX KW diabetic neuropathy; arthritic pain; migraine headache;
XX KW infantile epilepsy; ataxia; ss.
XX OS Synthetic.
XX PN WO2004016754-A2.
XX PD 26-FEB-2004.
XX PF 14-AUG-2003; 2003WO-US025465.
XX PR 14-AUG-2002; 2002US-0403416P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Roberds SL;
XX DR WPI; 2004-203785/19.
XX PT New antisense compound targeted to a nucleic acid molecule encoding
XX PT Nav1.3, useful for treating a disease or condition associated
XX PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX PT disorder, or ataxia.
XX PS Claim 4; SEQ ID NO 5588; 417pp; English.
XX CC The present invention relates to an antisense compound targeted to a
XX CC nucleic acid molecule encoding Nav1.3, where the antisense compound
XX CC specifically hybridizes with and inhibits the expression of Nav1.3. The
XX CC compound and composition are useful for treating a disease or condition
XX CC associated with Nav1.3, e.g. pain including but not limited to
XX CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX CC pain from burns, migraine headache, cluster headache, mild-to-moderate
XX CC headache; seizure disorder such as childhood seizure disorder, including
XX CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX CC sequence represents a chimeric phosphorothioate oligonucleotide with
XX CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
XX CC human Nav1.3 expression, the oligonucleotides are designed to target
XX CC different regions of the human Nav1.3 RNA.
XX SQ Sequence 20 BP; 1 A; 6 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1147 GAGCTGCTCCGCGACC 1162
DB 4 GAGCTGCTCCGCGACC 19

RESULT 2078
ADK79910
ID ADK79910 standard; DNA; 20 BP.
XX AC ADK79910;
XX DT 20-MAY-2004 (first entry)
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #7244.
XX KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX KW diabetic neuropathy; arthritic pain; migraine headache;
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KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
XX
XX 14-AUG-2003; 2003WO-US025465.
XX
XX 14-AUG-2002; 2002US-0403416P.
XX
PA (PHAA ) PHARMACIA CORP.
XX
XX Roberds SL;
XX
XX WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Navi1.3, useful for treating a disease or condition associated
PT with Navi1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 7244; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Navi1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Navi1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Navi1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Navi1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Navi1.3 RNA.
XX
XX Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. NO. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1147 GAGCTGCTGCGCGACC 1162
DB |||||||
5 GAGCTGCTGCGCGACC 20
RESULT 2079
ADK74978
ID ADK74978 standard; DNA; 20 BP.
XX
AC ADK74978;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Navi1.3 #2312.
XX
XX Navi1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
XX 14-AUG-2003; 2003WO-US025465.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Navi1.3, useful for treating a disease or condition associated
PT with Navi1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 7244; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Navi1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Navi1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Navi1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Navi1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Navi1.3 RNA.
XX
XX Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. NO. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1147 GAGCTGCTGCGCGACC 1162
DB |||||||
5 GAGCTGCTGCGCGACC 20
RESULT 2079
ADK74978
ID ADK74978 standard; DNA; 20 BP.
XX
AC ADK74978;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Navi1.3 #2312.
XX
XX Navi1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
XX 14-AUG-2003; 2003WO-US025465.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Navi1.3, useful for treating a disease or condition associated
PT with Navi1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 7244; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Navi1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Navi1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Navi1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Navi1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Navi1.3 RNA.
XX
XX Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. NO. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 917 TGGGCTTCTCTCTGTT 932
DB |||||||
3 TGAGCTTCTCTCTGTT 18
RESULT 2080
ADK79286/c
ID ADK79286 standard; DNA; 20 BP.
XX
AC ADK79286;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Navi1.3 #6620.
XX
XX Navi1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
XX 14-AUG-2003; 2003WO-US025465.
XX
XX 14-AUG-2002; 2002US-0403416P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Roberds SL;
XX
XX WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Navi1.3, useful for treating a disease or condition associated
PT with Navi1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 2312; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Navi1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Navi1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Navi1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Navi1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Navi1.3 RNA.
XX
XX Sequence 20 BP; 1 A; 7 C; 4 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. NO. 1.8e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 917 TGGGCTTCTCTCTGTT 932
DB |||||||
3 TGAGCTTCTCTCTGTT 18
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